

**Table 1. Energy Consumption by Sector and Source (1 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**01 - New England**

1998 -

|                            | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <b>Energy Consumption</b>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| <b>Residential</b>         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.25 | 0.25 | 0.25 | 0.25 | 0.24 | 0.24 | 0.24 | 0.24 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.22 | 0.22 | 0.22 | 0.22 | -0.8% |
| Kerosene                   | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -2.1% |
| Liquefied Petroleum Gas    | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.6% |
| Petroleum Subtotal         | 0.30 | 0.30 | 0.30 | 0.29 | 0.29 | 0.29 | 0.29 | 0.28 | 0.28 | 0.28 | 0.27 | 0.27 | 0.27 | 0.27 | 0.26 | 0.26 | 0.26 | 0.26 | 0.25 | 0.25 | 0.25 | 0.25 | -0.8% |
| Natural Gas                | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 1.2%  |
| Coal                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.5% |
| Renewable Energy 1/        | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.7%  |
| Electricity                | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 1.0%  |
| Delivered Energy           | 0.65 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.70 | 0.3%  |
| Electricity Related Losses | 0.27 | 0.30 | 0.32 | 0.34 | 0.33 | 0.33 | 0.33 | 0.33 | 0.32 | 0.32 | 0.31 | 0.31 | 0.31 | 0.30 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.5%  |
| Total                      | 0.92 | 0.98 | 0.99 | 1.02 | 1.01 | 1.01 | 1.00 | 1.01 | 1.00 | 1.00 | 1.00 | 0.99 | 1.00 | 0.99 | 0.97 | 0.97 | 0.98 | 0.99 | 0.99 | 0.99 | 1.00 | 0.99 | 0.4%  |
| <b>Commercial</b>          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | -0.7% |
| Residual Fuel              | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.1% |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Liquefied Petroleum Gas    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.5%  |
| Motor Gasoline 2/          | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Petroleum Subtotal         | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | -0.5% |
| Natural Gas                | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.7%  |
| Coal                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.5%  |
| Renewable Energy 3/        | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.0%  |
| Electricity                | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.18 | 0.7%  |
| Delivered Energy           | 0.44 | 0.45 | 0.45 | 0.45 | 0.46 | 0.46 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.4%  |
| Electricity Related Losses | 0.29 | 0.32 | 0.34 | 0.36 | 0.35 | 0.34 | 0.34 | 0.35 | 0.34 | 0.33 | 0.33 | 0.33 | 0.33 | 0.31 | 0.30 | 0.30 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.30 | 0.2%  |
| Total                      | 0.72 | 0.77 | 0.79 | 0.81 | 0.81 | 0.80 | 0.80 | 0.81 | 0.81 | 0.80 | 0.80 | 0.80 | 0.81 | 0.80 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.78 | 0.4%  |
| <b>Industrial 4/</b>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 1.1%  |
| Liquefied Petroleum Gas    | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.9%  |
| Petrochemical Feedstocks   | 0.02 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.8%  |
| Residual Fuel              | 0.07 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | -0.1% |
| Motor Gasoline 2/          | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 1.0%  |
| Other Petroleum 5/         | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.9%  |
| Petroleum Subtotal         | 0.16 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.5%  |
| Natural Gas 6/             | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.9%  |
| Metallurgical Coal         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Steam Coal                 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.1%  |
| Net Coal Coke Imports      | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 5.5%  |
| Coal Subtotal              | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 2.8%  |
| Renewable Energy 7/        | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.7%  |
| Electricity                | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.8%  |
| Delivered Energy           | 0.54 | 0.54 | 0.54 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.59 | 0.60 | 0.60 | 0.60 | 0.60 | 0.61 | 0.61 | 0.62 | 0.62 | 0.63 | 0.63 | 0.63 | 0.64 | 0.64 | 0.8%  |
| Electricity Related Losses | 0.16 | 0.18 | 0.18 | 0.20 | 0.20 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.18 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.17 | 0.3%  |
| Total                      | 0.70 | 0.71 | 0.73 | 0.75 | 0.76 | 0.77 | 0.77 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.79 | 0.80 | 0.80 | 0.81 | 0.81 | 0.81 | 0.6%  |

**Table 1. Energy Consumption by Sector and Source (2 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**01 - New England**

|   | 1998- |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2020 |      |       |
|---|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
|   | 1998  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
| <b>Transportation</b>                           |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                                 | 0.15  | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.5%  |
| Jet Fuel 8/                                     | 0.07  | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 2.2%  |
| Motor Gasoline 2/                               | 0.74  | 0.77 | 0.79 | 0.80 | 0.81 | 0.83 | 0.84 | 0.85 | 0.86 | 0.87 | 0.88 | 0.89 | 0.90 | 0.91 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 | 0.95 | 0.96 | 0.96 | 1.2%  |
| Residual Fuel                                   | 0.01  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 1.8%  |
| Liquefied Petroleum Gas                         | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 5.6%  |
| Other Petroleum 9/                              | 0.01  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.2%  |
| Petroleum Subtotal                              | 0.98  | 1.02 | 1.04 | 1.06 | 1.07 | 1.09 | 1.11 | 1.12 | 1.14 | 1.15 | 1.16 | 1.17 | 1.18 | 1.19 | 1.20 | 1.22 | 1.23 | 1.24 | 1.25 | 1.25 | 1.26 | 1.27 | 1.2%  |
| Pipeline Fuel Natural Gas                       | 0.01  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 1.2%  |
| Compressed Natural Gas                          | 0.00  | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 12.9% |
| Renewables (E85) 10/                            | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.1% |
| Methanol (M85) 11/                              | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 14.0% |
| Liquid Hydrogen                                 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Electricity                                     | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 3.9%  |
| Delivered Energy                                | 0.99  | 1.03 | 1.05 | 1.07 | 1.09 | 1.11 | 1.13 | 1.15 | 1.16 | 1.18 | 1.19 | 1.21 | 1.22 | 1.23 | 1.24 | 1.26 | 1.27 | 1.28 | 1.29 | 1.30 | 1.31 | 1.31 | 1.3%  |
| Electricity Related Losses                      | 0.01  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 3.4%  |
| Total   | 1.00  | 1.04 | 1.06 | 1.08 | 1.10 | 1.12 | 1.14 | 1.16 | 1.17 | 1.19 | 1.20 | 1.22 | 1.23 | 1.24 | 1.25 | 1.27 | 1.28 | 1.29 | 1.30 | 1.31 | 1.32 | 1.33 | 1.3%  |
| <b>Delivered Energy Consumption All Sectors</b> |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                                 | 0.50  | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.49 | 0.49 | 0.49 | 0.49 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.47 | 0.47 | 0.47 | -0.2% |
| Kerosene  | 0.02  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -1.7% |
| Jet Fuel 8/                                     | 0.07  | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 2.2%  |
| Liquefied Petroleum Gas                         | 0.04  | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.4%  |
| Motor Gasoline 2/                               | 0.75  | 0.78 | 0.80 | 0.81 | 0.82 | 0.84 | 0.85 | 0.86 | 0.88 | 0.89 | 0.90 | 0.91 | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 | 0.95 | 0.96 | 0.96 | 0.97 | 0.98 | 1.2%  |
| Petrochemical Feedstocks                        | 0.02  | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.8%  |
| Residual Fuel                                   | 0.10  | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.1%  |
| Other Petroleum 12/                             | 0.05  | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.8%  |
| Petroleum Subtotal                              | 1.54  | 1.57 | 1.59 | 1.61 | 1.62 | 1.64 | 1.66 | 1.67 | 1.68 | 1.70 | 1.70 | 1.71 | 1.72 | 1.73 | 1.74 | 1.75 | 1.76 | 1.77 | 1.77 | 1.78 | 1.78 | 1.79 | 0.7%  |
| Natural Gas 6/                                  | 0.48  | 0.50 | 0.51 | 0.51 | 0.52 | 0.52 | 0.53 | 0.54 | 0.54 | 0.55 | 0.55 | 0.56 | 0.56 | 0.57 | 0.57 | 0.58 | 0.59 | 0.59 | 0.59 | 0.60 | 0.60 | 0.60 | 1.1%  |
| Metallurgical Coal                              | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Steam Coal                                      | 0.01  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.0%  |
| Net Coal Coke Imports                           | 0.00  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 5.5%  |
| Coal Subtotal                                   | 0.01  | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 2.4%  |
| Renewable Energy 13/                            | 0.19  | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.23 | 0.7%  |
| Methanol (M85) 11/                              | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 14.0% |
| Liquid Hydrogen                                 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Electricity                                     | 0.40  | 0.41 | 0.41 | 0.42 | 0.42 | 0.43 | 0.43 | 0.44 | 0.44 | 0.45 | 0.45 | 0.46 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.9%  |
| Delivered Energy                                | 2.62  | 2.69 | 2.72 | 2.76 | 2.78 | 2.82 | 2.85 | 2.87 | 2.90 | 2.93 | 2.94 | 2.97 | 2.98 | 3.00 | 3.02 | 3.05 | 3.07 | 3.08 | 3.09 | 3.10 | 3.11 | 3.13 | 0.8%  |
| Electricity Related Losses                      | 0.72  | 0.80 | 0.85 | 0.90 | 0.89 | 0.87 | 0.87 | 0.88 | 0.87 | 0.85 | 0.84 | 0.83 | 0.84 | 0.80 | 0.77 | 0.77 | 0.78 | 0.79 | 0.79 | 0.79 | 0.80 | 0.78 | 0.4%  |
| Total   | 3.34  | 3.49 | 3.57 | 3.66 | 3.68 | 3.69 | 3.72 | 3.75 | 3.77 | 3.77 | 3.78 | 3.80 | 3.82 | 3.80 | 3.79 | 3.81 | 3.85 | 3.87 | 3.88 | 3.90 | 3.92 | 3.91 | 0.7%  |
| <b>Electric Generators 14/</b>                  |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                                 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.0% |
| Residual Fuel                                   | 0.23  | 0.16 | 0.19 | 0.17 | 0.18 | 0.16 | 0.14 | 0.13 | 0.11 | 0.09 | 0.08 | 0.05 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | -9.4% |
| Petroleum Subtotal                              | 0.23  | 0.16 | 0.19 | 0.18 | 0.18 | 0.16 | 0.14 | 0.13 | 0.11 | 0.09 | 0.08 | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -9.3% |
| Natural Gas                                     | 0.20  | 0.15 | 0.16 | 0.17 | 0.17 | 0.19 | 0.22 | 0.28 | 0.32 | 0.35 | 0.37 | 0.41 | 0.43 | 0.47 | 0.50 | 0.51 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 4.5%  |
| Steam Coal                                      | 0.15  | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 1.8%  |
| Nuclear Power                                   | 0.22  | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.26 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.23 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | -0.9% |
| Renewable Energy 15/                            | 0.16  | 0.15 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 1.1%  |
| Electricity Imports 16/                         | 0.16  | 0.21 | 0.21 | 0.27 | 0.26 | 0.24 | 0.22 | 0.24 | 0.21 | 0.18 | 0.16 | 0.13 | 0.14 | 0.11 | 0.11 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.12 | 0.11 | -1.8% |
| Total   | 1.12  | 1.21 | 1.26 | 1.32 | 1.31 | 1.30 | 1.30 | 1.31 | 1.31 | 1.30 | 1.29 | 1.29 | 1.30 | 1.26 | 1.24 | 1.24 | 1.26 | 1.26 | 1.27 | 1.27 | 1.28 | 1.27 | 0.6%  |

**Table 1. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
01 - New England**

1998 -

|  | 1998        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 2006        | 2007        | 2008        | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        | 2015        | 2016        | 2017        | 2018        | 2019        | 2020        | 2020        |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Total Energy Consumption</b>            |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Distillate Fuel                            | 0.50        | 0.51        | 0.51        | 0.51        | 0.51        | 0.51        | 0.50        | 0.50        | 0.50        | 0.50        | 0.49        | 0.49        | 0.49        | 0.49        | 0.49        | 0.48        | 0.48        | 0.48        | 0.48        | 0.47        | 0.47        | 0.47        | -0.2%       |
| Kerosene                                   | 0.02        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | -1.7%       |
| Jet Fuel 8/                                | 0.07        | 0.07        | 0.07        | 0.07        | 0.08        | 0.08        | 0.08        | 0.08        | 0.08        | 0.09        | 0.09        | 0.09        | 0.09        | 0.09        | 0.10        | 0.10        | 0.10        | 0.10        | 0.10        | 0.11        | 0.11        | 0.11        | 2.2%        |
| Liquefied Petroleum Gas                    | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.04        | 0.4%        |
| Motor Gasoline 2/                          | 0.75        | 0.78        | 0.80        | 0.81        | 0.82        | 0.84        | 0.85        | 0.86        | 0.88        | 0.89        | 0.90        | 0.91        | 0.91        | 0.92        | 0.93        | 0.94        | 0.95        | 0.95        | 0.96        | 0.96        | 0.97        | 0.98        | 1.2%        |
| Petrochemical Feedstocks                   | 0.02        | 0.01        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.02        | 0.8%        |
| Residual Fuel                              | 0.33        | 0.24        | 0.28        | 0.26        | 0.27        | 0.25        | 0.23        | 0.22        | 0.20        | 0.18        | 0.17        | 0.15        | 0.13        | 0.13        | 0.13        | 0.12        | 0.13        | 0.12        | 0.13        | 0.13        | 0.13        | 0.13        | -4.2%       |
| Other Petroleum 12/                        | 0.05        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.06        | 0.8%        |
| Petroleum Subtotal                         | 1.77        | 1.72        | 1.78        | 1.78        | 1.80        | 1.80        | 1.80        | 1.80        | 1.79        | 1.79        | 1.78        | 1.77        | 1.76        | 1.76        | 1.77        | 1.78        | 1.79        | 1.79        | 1.80        | 1.80        | 1.81        | 1.81        | 0.1%        |
| Natural Gas                                | 0.67        | 0.66        | 0.66        | 0.69        | 0.69        | 0.71        | 0.75        | 0.81        | 0.86        | 0.90        | 0.92        | 0.97        | 1.00        | 1.04        | 1.07        | 1.09        | 1.11        | 1.11        | 1.12        | 1.12        | 1.12        | 1.12        | 2.4%        |
| Metallurgical Coal                         | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | N/A         |
| Steam Coal                                 | 0.16        | 0.23        | 0.23        | 0.23        | 0.23        | 0.23        | 0.23        | 0.23        | 0.23        | 0.23        | 0.23        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 1.8%        |
| Net Coal Coke Imports                      | 0.00        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 5.5%        |
| Coal Subtotal                              | 0.17        | 0.23        | 0.23        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.24        | 0.25        | 0.25        | 0.25        | 0.25        | 0.25        | 0.25        | 0.25        | 0.25        | 0.25        | 0.25        | 0.25        | 1.9%        |
| Nuclear Power                              | 0.22        | 0.31        | 0.31        | 0.31        | 0.31        | 0.31        | 0.31        | 0.26        | 0.27        | 0.27        | 0.27        | 0.27        | 0.27        | 0.23        | 0.18        | 0.18        | 0.18        | 0.18        | 0.18        | 0.18        | 0.18        | 0.18        | -0.9%       |
| Renewable Energy 17/                       | 0.35        | 0.35        | 0.36        | 0.37        | 0.37        | 0.38        | 0.38        | 0.39        | 0.39        | 0.40        | 0.40        | 0.41        | 0.41        | 0.41        | 0.41        | 0.42        | 0.42        | 0.42        | 0.42        | 0.42        | 0.43        | 0.43        | 0.9%        |
| Methanol (M85) 11/                         | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 14.0%       |
| Liquid Hydrogen                            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | N/A         |
| Electricity Imports 16/                    | 0.16        | 0.21        | 0.21        | 0.27        | 0.26        | 0.24        | 0.22        | 0.24        | 0.21        | 0.18        | 0.16        | 0.13        | 0.14        | 0.11        | 0.11        | 0.10        | 0.10        | 0.11        | 0.11        | 0.11        | 0.12        | 0.11        | -1.8%       |
| <b>Total</b>                               | <b>3.34</b> | <b>3.49</b> | <b>3.57</b> | <b>3.66</b> | <b>3.68</b> | <b>3.69</b> | <b>3.72</b> | <b>3.75</b> | <b>3.77</b> | <b>3.77</b> | <b>3.78</b> | <b>3.80</b> | <b>3.82</b> | <b>3.80</b> | <b>3.79</b> | <b>3.81</b> | <b>3.85</b> | <b>3.87</b> | <b>3.88</b> | <b>3.90</b> | <b>3.92</b> | <b>3.91</b> | <b>0.7%</b> |
| <b>Energy Use &amp; Related Statistics</b> |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| Delivered Energy Use                       | 2.62        | 2.69        | 2.72        | 2.76        | 2.78        | 2.82        | 2.85        | 2.87        | 2.90        | 2.93        | 2.94        | 2.97        | 2.98        | 3.00        | 3.02        | 3.05        | 3.07        | 3.08        | 3.09        | 3.10        | 3.11        | 3.13        | 0.8%        |
| Total Energy Use                           | 3.34        | 3.49        | 3.57        | 3.66        | 3.68        | 3.69        | 3.72        | 3.75        | 3.77        | 3.77        | 3.78        | 3.80        | 3.82        | 3.80        | 3.79        | 3.81        | 3.85        | 3.87        | 3.88        | 3.90        | 3.92        | 3.91        | 0.7%        |
| Population (millions)                      | 13.44       | 13.57       | 13.63       | 13.70       | 13.77       | 13.83       | 13.88       | 13.94       | 14.00       | 14.05       | 14.10       | 14.16       | 14.22       | 14.27       | 14.33       | 14.38       | 14.44       | 14.49       | 14.54       | 14.59       | 14.63       | 14.67       | 0.4%        |
| US GDP (billion 1992 dollars)              | 7552        | 7991        | 8191        | 8377        | 8596        | 8824        | 9056        | 9251        | 9449        | 9651        | 9840        | 10054       | 10218       | 10416       | 10648       | 10906       | 11147       | 11331       | 11533       | 11741       | 11959       | 12179       | 2.2%        |
| Total Carbon Emis.(mill. m. tons)          | 1485.4      | 1552.4      | 1575.6      | 1599.5      | 1628.5      | 1657.5      | 1683.4      | 1707.8      | 1730.6      | 1750.9      | 1767.1      | 1786.6      | 1802.6      | 1821.3      | 1842.3      | 1865.8      | 1893.4      | 1908.8      | 1927.8      | 1944.7      | 1961.6      | 1979.2      | 1.3%        |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 2. Energy Consumption by Sector and Source (1 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**02 - Middle Atlantic**

1998 -

|                            | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <b>Energy Consumption</b>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| <b>Residential</b>         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.33 | 0.33 | 0.32 | 0.32 | 0.31 | 0.31 | 0.30 | 0.30 | 0.29 | 0.29 | 0.28 | 0.28 | 0.28 | 0.27 | 0.27 | 0.26 | 0.26 | 0.26 | 0.25 | 0.25 | 0.25 | 0.24 | -1.3% |
| Kerosene                   | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -2.2% |
| Liquefied Petroleum Gas    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -1.0% |
| Petroleum Subtotal         | 0.39 | 0.38 | 0.38 | 0.37 | 0.37 | 0.36 | 0.36 | 0.35 | 0.35 | 0.34 | 0.33 | 0.33 | 0.33 | 0.32 | 0.32 | 0.31 | 0.31 | 0.30 | 0.30 | 0.30 | 0.29 | 0.29 | -1.3% |
| Natural Gas                | 0.80 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.90 | 0.5%  |
| Coal                       | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.4% |
| Renewable Energy 1/        | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.10 | 0.3%  |
| Electricity                | 0.40 | 0.41 | 0.42 | 0.42 | 0.43 | 0.43 | 0.44 | 0.44 | 0.44 | 0.45 | 0.45 | 0.46 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.48 | 0.49 | 0.9%  |
| Delivered Energy           | 1.69 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 | 1.78 | 1.78 | 1.78 | 1.79 | 1.79 | 1.78 | 1.78 | 1.79 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.79 | 0.2%  |
| Electricity Related Losses | 0.83 | 0.81 | 0.82 | 0.83 | 0.84 | 0.86 | 0.87 | 0.88 | 0.89 | 0.91 | 0.91 | 0.91 | 0.90 | 0.92 | 0.94 | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 | 0.95 | 0.6%  |
| Total                      | 2.52 | 2.60 | 2.61 | 2.62 | 2.63 | 2.65 | 2.65 | 2.67 | 2.67 | 2.70 | 2.70 | 2.69 | 2.69 | 2.71 | 2.72 | 2.71 | 2.70 | 2.71 | 2.70 | 2.71 | 2.72 | 2.73 | 0.4%  |
| <b>Commercial</b>          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.10 | -0.8% |
| Residual Fuel              | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | -0.3% |
| Kerosene                   | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.5% |
| Liquefied Petroleum Gas    | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.3%  |
| Motor Gasoline 2/          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Petroleum Subtotal         | 0.22 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.19 | -0.6% |
| Natural Gas                | 0.55 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.60 | 0.60 | 0.60 | 0.60 | 0.61 | 0.61 | 0.61 | 0.61 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.61 | 0.5%  |
| Coal                       | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.3%  |
| Renewable Energy 3/        | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.0%  |
| Electricity                | 0.47 | 0.49 | 0.49 | 0.50 | 0.50 | 0.50 | 0.51 | 0.51 | 0.52 | 0.52 | 0.53 | 0.53 | 0.53 | 0.53 | 0.54 | 0.54 | 0.54 | 0.53 | 0.53 | 0.53 | 0.53 | 0.53 | 0.5%  |
| Delivered Energy           | 1.28 | 1.32 | 1.33 | 1.34 | 1.34 | 1.35 | 1.35 | 1.36 | 1.36 | 1.37 | 1.38 | 1.38 | 1.39 | 1.39 | 1.39 | 1.39 | 1.39 | 1.39 | 1.39 | 1.39 | 1.38 | 1.37 | 0.3%  |
| Electricity Related Losses | 0.99 | 0.96 | 0.97 | 0.98 | 0.99 | 1.00 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.05 | 1.05 | 1.07 | 1.08 | 1.06 | 1.05 | 1.04 | 1.04 | 1.04 | 1.03 | 1.03 | 0.2%  |
| Total                      | 2.27 | 2.28 | 2.30 | 2.32 | 2.33 | 2.35 | 2.37 | 2.39 | 2.40 | 2.42 | 2.44 | 2.43 | 2.44 | 2.46 | 2.48 | 2.45 | 2.44 | 2.43 | 2.43 | 2.43 | 2.42 | 2.40 | 0.2%  |
| <b>Industrial 4/</b>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 1.0%  |
| Liquefied Petroleum Gas    | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.7%  |
| Petrochemical Feedstocks   | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.8%  |
| Residual Fuel              | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.3%  |
| Motor Gasoline 2/          | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 1.0%  |
| Other Petroleum 5/         | 0.38 | 0.48 | 0.49 | 0.49 | 0.48 | 0.49 | 0.49 | 0.49 | 0.49 | 0.48 | 0.48 | 0.48 | 0.49 | 0.49 | 0.49 | 0.49 | 0.50 | 0.48 | 0.50 | 0.48 | 0.48 | 0.49 | 1.2%  |
| Petroleum Subtotal         | 0.65 | 0.74 | 0.75 | 0.76 | 0.76 | 0.77 | 0.78 | 0.78 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.80 | 0.80 | 0.81 | 0.80 | 0.81 | 0.80 | 0.80 | 0.81 | 1.0%  |
| Natural Gas 6/             | 0.63 | 0.64 | 0.64 | 0.65 | 0.67 | 0.68 | 0.69 | 0.70 | 0.71 | 0.71 | 0.71 | 0.72 | 0.72 | 0.72 | 0.73 | 0.74 | 0.74 | 0.75 | 0.75 | 0.76 | 0.76 | 0.77 | 0.9%  |
| Metallurgical Coal         | 0.29 | 0.28 | 0.28 | 0.27 | 0.27 | 0.26 | 0.26 | 0.26 | 0.25 | 0.25 | 0.24 | 0.24 | 0.24 | 0.23 | 0.23 | 0.22 | 0.22 | 0.22 | 0.21 | 0.21 | 0.21 | 0.20 | -1.6% |
| Steam Coal                 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.0%  |
| Net Coal Coke Imports      | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 5.5%  |
| Coal Subtotal              | 0.43 | 0.43 | 0.42 | 0.42 | 0.42 | 0.42 | 0.41 | 0.41 | 0.41 | 0.40 | 0.40 | 0.39 | 0.39 | 0.39 | 0.38 | 0.38 | 0.38 | 0.37 | 0.37 | 0.36 | 0.36 | 0.36 | -0.9% |
| Renewable Energy 7/        | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.6%  |
| Electricity                | 0.30 | 0.30 | 0.30 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.8%  |
| Delivered Energy           | 2.21 | 2.31 | 2.33 | 2.34 | 2.37 | 2.39 | 2.42 | 2.44 | 2.44 | 2.45 | 2.45 | 2.45 | 2.45 | 2.46 | 2.47 | 2.48 | 2.50 | 2.49 | 2.51 | 2.49 | 2.50 | 2.52 | 0.6%  |
| Electricity Related Losses | 0.63 | 0.60 | 0.60 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.66 | 0.66 | 0.67 | 0.66 | 0.66 | 0.67 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.69 | 0.69 | 0.69 | 0.5%  |
| Total                      | 2.84 | 2.91 | 2.92 | 2.95 | 2.98 | 3.02 | 3.06 | 3.09 | 3.10 | 3.11 | 3.11 | 3.11 | 3.10 | 3.13 | 3.16 | 3.16 | 3.18 | 3.17 | 3.19 | 3.18 | 3.19 | 3.22 | 0.6%  |

**Table 2. Energy Consumption by Sector and Source (2 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**02 - Middle Atlantic**

1998-

|  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Transportation                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 0.43  | 0.44  | 0.44  | 0.45  | 0.45  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.47  | 0.47  | 0.47  | 0.47  | 0.47  | 0.47  | 0.47  | 0.4%  |
| Jet Fuel 8/                              | 0.39  | 0.41  | 0.42  | 0.43  | 0.44  | 0.45  | 0.47  | 0.48  | 0.49  | 0.50  | 0.51  | 0.52  | 0.53  | 0.54  | 0.55  | 0.56  | 0.58  | 0.59  | 0.60  | 0.61  | 0.62  | 0.63  | 2.2%  |
| Motor Gasoline 2/                        | 1.80  | 1.85  | 1.87  | 1.89  | 1.91  | 1.93  | 1.95  | 1.97  | 1.99  | 2.00  | 2.02  | 2.04  | 2.05  | 2.05  | 2.06  | 2.08  | 2.09  | 2.10  | 2.10  | 2.11  | 2.12  | 2.13  | 0.8%  |
| Residual Fuel                            | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 1.9%  |
| Liquefied Petroleum Gas                  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 5.3%  |
| Other Petroleum 9/                       | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.1%  |
| Petroleum Subtotal                       | 2.73  | 2.82  | 2.85  | 2.89  | 2.92  | 2.97  | 3.00  | 3.04  | 3.07  | 3.10  | 3.13  | 3.16  | 3.18  | 3.20  | 3.22  | 3.25  | 3.28  | 3.30  | 3.32  | 3.34  | 3.36  | 3.38  | 1.0%  |
| Pipeline Fuel Natural Gas                | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 1.4%  |
| Compressed Natural Gas                   | 0.00  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 12.2% |
| Renewables (E85) 10/                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 15.5% |
| Methanol (M85) 11/                       | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 13.5% |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Electricity                              | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 3.5%  |
| Delivered Energy                         | 2.79  | 2.89  | 2.93  | 2.97  | 3.01  | 3.06  | 3.10  | 3.14  | 3.18  | 3.22  | 3.25  | 3.28  | 3.31  | 3.33  | 3.36  | 3.40  | 3.43  | 3.45  | 3.47  | 3.49  | 3.51  | 3.53  | 1.1%  |
| Electricity Related Losses               | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 3.2%  |
| Total                                    | 2.81  | 2.91  | 2.95  | 2.99  | 3.03  | 3.08  | 3.13  | 3.17  | 3.21  | 3.25  | 3.28  | 3.32  | 3.34  | 3.37  | 3.40  | 3.44  | 3.47  | 3.49  | 3.51  | 3.53  | 3.55  | 3.57  | 1.1%  |
| Delivered Energy Consumption All Sectors |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.93  | 0.93  | 0.93  | 0.92  | 0.91  | 0.91  | 0.91  | 0.90  | 0.90  | 0.90  | 0.90  | 0.89  | 0.89  | 0.89  | 0.88  | -0.3% |
| Kerosene                                 | 0.05  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | -1.4% |
| Jet Fuel 8/                              | 0.39  | 0.41  | 0.42  | 0.43  | 0.44  | 0.45  | 0.47  | 0.48  | 0.49  | 0.50  | 0.51  | 0.52  | 0.53  | 0.54  | 0.55  | 0.56  | 0.58  | 0.59  | 0.60  | 0.61  | 0.62  | 0.63  | 2.2%  |
| Liquefied Petroleum Gas                  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.08  | 0.08  | 0.08  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.5%  |
| Motor Gasoline 2/                        | 1.81  | 1.87  | 1.89  | 1.91  | 1.92  | 1.95  | 1.97  | 1.99  | 2.01  | 2.02  | 2.04  | 2.05  | 2.06  | 2.07  | 2.08  | 2.10  | 2.11  | 2.12  | 2.12  | 2.13  | 2.14  | 2.14  | 0.8%  |
| Petrochemical Feedstocks                 | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.15  | 0.15  | 0.15  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.8%  |
| Residual Fuel                            | 0.19  | 0.19  | 0.19  | 0.19  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.23  | 0.23  | 0.8%  |
| Other Petroleum 12/                      | 0.40  | 0.50  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.52  | 0.51  | 0.50  | 0.50  | 0.50  | 0.51  | 0.51  | 0.51  | 0.51  | 0.52  | 0.51  | 0.52  | 0.50  | 0.50  | 0.52  | 1.2%  |
| Petroleum Subtotal                       | 3.99  | 4.15  | 4.20  | 4.23  | 4.26  | 4.31  | 4.35  | 4.38  | 4.41  | 4.43  | 4.45  | 4.48  | 4.49  | 4.52  | 4.54  | 4.57  | 4.60  | 4.60  | 4.63  | 4.63  | 4.64  | 4.68  | 0.7%  |
| Natural Gas 6/                           | 2.03  | 2.15  | 2.16  | 2.18  | 2.20  | 2.22  | 2.24  | 2.25  | 2.26  | 2.28  | 2.29  | 2.30  | 2.31  | 2.32  | 2.33  | 2.34  | 2.35  | 2.36  | 2.37  | 2.37  | 2.38  | 2.38  | 0.7%  |
| Metallurgical Coal                       | 0.29  | 0.28  | 0.28  | 0.27  | 0.27  | 0.26  | 0.26  | 0.26  | 0.25  | 0.25  | 0.24  | 0.24  | 0.24  | 0.23  | 0.23  | 0.22  | 0.22  | 0.22  | 0.21  | 0.21  | 0.21  | 0.20  | -1.6% |
| Steam Coal                               | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.0%  |
| Net Coal Coke Imports                    | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 5.5%  |
| Coal Subtotal                            | 0.47  | 0.46  | 0.46  | 0.46  | 0.45  | 0.45  | 0.45  | 0.45  | 0.44  | 0.44  | 0.43  | 0.43  | 0.43  | 0.42  | 0.42  | 0.41  | 0.41  | 0.41  | 0.40  | 0.40  | 0.40  | 0.39  | -0.8% |
| Renewable Energy 13/                     | 0.31  | 0.33  | 0.33  | 0.33  | 0.33  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.36  | 0.6%  |
| Methanol (M85) 11/                       | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 13.5% |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Electricity                              | 1.18  | 1.21  | 1.22  | 1.24  | 1.25  | 1.27  | 1.28  | 1.29  | 1.30  | 1.32  | 1.33  | 1.33  | 1.34  | 1.35  | 1.36  | 1.36  | 1.37  | 1.38  | 1.38  | 1.38  | 1.39  | 1.39  | 0.8%  |
| Delivered Energy                         | 7.98  | 8.31  | 8.37  | 8.44  | 8.51  | 8.59  | 8.66  | 8.72  | 8.77  | 8.82  | 8.86  | 8.90  | 8.93  | 8.98  | 9.01  | 9.05  | 9.11  | 9.12  | 9.15  | 9.15  | 9.17  | 9.22  | 0.7%  |
| Electricity Related Losses               | 2.47  | 2.38  | 2.40  | 2.43  | 2.46  | 2.52  | 2.56  | 2.59  | 2.61  | 2.65  | 2.67  | 2.66  | 2.64  | 2.69  | 2.74  | 2.70  | 2.68  | 2.68  | 2.68  | 2.70  | 2.70  | 2.71  | 0.4%  |
| Total                                    | 10.44 | 10.69 | 10.78 | 10.87 | 10.97 | 11.11 | 11.22 | 11.31 | 11.39 | 11.47 | 11.53 | 11.56 | 11.57 | 11.67 | 11.75 | 11.75 | 11.79 | 11.80 | 11.83 | 11.85 | 11.87 | 11.92 | 0.6%  |
| Electric Generators 14/                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 0.01  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -5.0% |
| Residual Fuel                            | 0.21  | 0.20  | 0.17  | 0.14  | 0.13  | 0.16  | 0.15  | 0.15  | 0.14  | 0.13  | 0.10  | 0.11  | 0.07  | 0.07  | 0.06  | 0.06  | 0.06  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | -6.4% |
| Petroleum Subtotal                       | 0.21  | 0.20  | 0.18  | 0.14  | 0.13  | 0.16  | 0.15  | 0.15  | 0.14  | 0.13  | 0.11  | 0.11  | 0.07  | 0.07  | 0.06  | 0.06  | 0.06  | 0.06  | 0.05  | 0.05  | 0.05  | 0.05  | -6.3% |
| Natural Gas                              | 0.30  | 0.17  | 0.18  | 0.21  | 0.23  | 0.26  | 0.32  | 0.37  | 0.46  | 0.51  | 0.56  | 0.68  | 0.75  | 0.80  | 0.85  | 0.95  | 1.07  | 1.14  | 1.19  | 1.21  | 1.20  | 1.21  | 6.6%  |
| Steam Coal                               | 1.42  | 1.51  | 1.54  | 1.57  | 1.61  | 1.67  | 1.68  | 1.68  | 1.69  | 1.70  | 1.71  | 1.70  | 1.70  | 1.70  | 1.71  | 1.72  | 1.73  | 1.74  | 1.75  | 1.75  | 1.76  | 1.76  | 1.0%  |
| Nuclear Power                            | 1.38  | 1.38  | 1.38  | 1.38  | 1.37  | 1.32  | 1.32  | 1.29  | 1.24  | 1.24  | 1.23  | 1.08  | 1.03  | 1.03  | 1.01  | 0.88  | 0.73  | 0.66  | 0.60  | 0.60  | 0.60  | 0.60  | -3.7% |
| Renewable Energy 15/                     | 0.30  | 0.29  | 0.30  | 0.31  | 0.31  | 0.32  | 0.32  | 0.34  | 0.34  | 0.35  | 0.37  | 0.38  | 0.40  | 0.43  | 0.44  | 0.44  | 0.44  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 1.9%  |
| Electricity Imports 16/                  | 0.03  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.04  | 0.04  | 0.03  | 0.03  | 0.03  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | -1.8% |
| Total                                    | 3.64  | 3.59  | 3.62  | 3.67  | 3.71  | 3.78  | 3.84  | 3.88  | 3.92  | 3.97  | 4.00  | 3.99  | 3.98  | 4.05  | 4.10  | 4.07  | 4.05  | 4.06  | 4.06  | 4.08  | 4.09  | 4.10  | 0.5%  |

**Table 2. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
02 - Middle Atlantic**

1998 -

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2020        |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Total Energy Consumption</b>            |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Distillate Fuel                            | 0.94         | 0.95         | 0.95         | 0.94         | 0.94         | 0.94         | 0.94         | 0.94         | 0.93         | 0.93         | 0.92         | 0.92         | 0.91         | 0.91         | 0.90         | 0.90         | 0.90         | 0.90         | 0.89         | 0.89         | 0.89         | 0.89         | -0.3%       |
| Kerosene                                   | 0.05         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | -1.4%       |
| Jet Fuel 8/                                | 0.39         | 0.41         | 0.42         | 0.43         | 0.44         | 0.45         | 0.47         | 0.48         | 0.49         | 0.50         | 0.51         | 0.52         | 0.53         | 0.54         | 0.55         | 0.56         | 0.58         | 0.59         | 0.60         | 0.61         | 0.62         | 0.63         | 2.2%        |
| Liquefied Petroleum Gas                    | 0.06         | 0.06         | 0.06         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.08         | 0.08         | 0.08         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.5%        |
| Motor Gasoline 2/                          | 1.81         | 1.87         | 1.89         | 1.91         | 1.92         | 1.95         | 1.97         | 1.99         | 2.01         | 2.02         | 2.04         | 2.05         | 2.06         | 2.07         | 2.08         | 2.10         | 2.11         | 2.12         | 2.12         | 2.13         | 2.14         | 2.14         | 0.8%        |
| Petrochemical Feedstocks                   | 0.14         | 0.14         | 0.14         | 0.14         | 0.14         | 0.15         | 0.15         | 0.15         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.8%        |
| Residual Fuel                              | 0.40         | 0.38         | 0.36         | 0.33         | 0.33         | 0.36         | 0.35         | 0.35         | 0.34         | 0.33         | 0.31         | 0.32         | 0.29         | 0.28         | 0.28         | 0.27         | 0.28         | 0.28         | 0.27         | 0.27         | 0.27         | 0.28         | -1.7%       |
| Other Petroleum 12/                        | 0.40         | 0.50         | 0.51         | 0.51         | 0.51         | 0.51         | 0.51         | 0.52         | 0.51         | 0.50         | 0.50         | 0.50         | 0.51         | 0.51         | 0.51         | 0.51         | 0.52         | 0.51         | 0.52         | 0.50         | 0.50         | 0.52         | 1.2%        |
| Petroleum Subtotal                         | 4.20         | 4.35         | 4.37         | 4.37         | 4.39         | 4.47         | 4.50         | 4.53         | 4.55         | 4.56         | 4.56         | 4.59         | 4.57         | 4.59         | 4.61         | 4.62         | 4.66         | 4.66         | 4.68         | 4.67         | 4.69         | 4.73         | 0.5%        |
| Natural Gas                                | 2.33         | 2.33         | 2.34         | 2.39         | 2.43         | 2.48         | 2.55         | 2.62         | 2.73         | 2.79         | 2.84         | 2.98         | 3.06         | 3.12         | 3.19         | 3.30         | 3.42         | 3.50         | 3.55         | 3.58         | 3.58         | 3.60         | 2.0%        |
| Metallurgical Coal                         | 0.29         | 0.28         | 0.28         | 0.27         | 0.27         | 0.26         | 0.26         | 0.26         | 0.25         | 0.25         | 0.24         | 0.24         | 0.24         | 0.23         | 0.23         | 0.22         | 0.22         | 0.22         | 0.21         | 0.21         | 0.21         | 0.20         | -1.6%       |
| Steam Coal                                 | 1.60         | 1.69         | 1.72         | 1.75         | 1.79         | 1.85         | 1.86         | 1.87         | 1.88         | 1.88         | 1.89         | 1.88         | 1.88         | 1.88         | 1.89         | 1.90         | 1.91         | 1.92         | 1.92         | 1.93         | 1.94         | 1.94         | 0.9%        |
| Net Coal Coke Imports                      | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 5.5%        |
| Coal Subtotal                              | 1.89         | 1.97         | 2.00         | 2.03         | 2.07         | 2.12         | 2.13         | 2.13         | 2.14         | 2.14         | 2.14         | 2.13         | 2.12         | 2.12         | 2.13         | 2.13         | 2.15         | 2.14         | 2.15         | 2.15         | 2.16         | 2.15         | 0.6%        |
| Nuclear Power                              | 1.38         | 1.38         | 1.38         | 1.38         | 1.37         | 1.32         | 1.32         | 1.29         | 1.24         | 1.24         | 1.23         | 1.08         | 1.03         | 1.03         | 1.01         | 0.88         | 0.73         | 0.66         | 0.60         | 0.60         | 0.60         | 0.60         | -3.7%       |
| Renewable Energy 17/                       | 0.61         | 0.62         | 0.63         | 0.64         | 0.65         | 0.66         | 0.66         | 0.68         | 0.68         | 0.69         | 0.71         | 0.73         | 0.75         | 0.78         | 0.78         | 0.79         | 0.79         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 1.3%        |
| Methanol (M85) 11/                         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 13.5%       |
| Liquid Hydrogen                            | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Electricity Imports 16/                    | 0.03         | 0.04         | 0.04         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.04         | 0.04         | 0.03         | 0.03         | 0.03         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | -1.8%       |
| <b>Total</b>                               | <b>10.44</b> | <b>10.69</b> | <b>10.78</b> | <b>10.87</b> | <b>10.97</b> | <b>11.11</b> | <b>11.22</b> | <b>11.31</b> | <b>11.39</b> | <b>11.47</b> | <b>11.53</b> | <b>11.56</b> | <b>11.57</b> | <b>11.67</b> | <b>11.75</b> | <b>11.75</b> | <b>11.79</b> | <b>11.80</b> | <b>11.83</b> | <b>11.85</b> | <b>11.87</b> | <b>11.92</b> | <b>0.6%</b> |
| <b>Energy Use &amp; Related Statistics</b> |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Delivered Energy Use                       | 7.98         | 8.31         | 8.37         | 8.44         | 8.51         | 8.59         | 8.66         | 8.72         | 8.77         | 8.82         | 8.86         | 8.90         | 8.93         | 8.98         | 9.01         | 9.05         | 9.11         | 9.12         | 9.15         | 9.15         | 9.17         | 9.22         | 0.7%        |
| Total Energy Use                           | 10.44        | 10.69        | 10.78        | 10.87        | 10.97        | 11.11        | 11.22        | 11.31        | 11.39        | 11.47        | 11.53        | 11.56        | 11.57        | 11.67        | 11.75        | 11.75        | 11.79        | 11.80        | 11.83        | 11.85        | 11.87        | 11.92        | 0.6%        |
| Population (millions)                      | 38.30        | 38.42        | 38.46        | 38.52        | 38.57        | 38.63        | 38.69        | 38.76        | 38.82        | 38.89        | 38.95        | 39.02        | 39.08        | 39.15        | 39.22        | 39.28        | 39.34        | 39.40        | 39.45        | 39.50        | 39.55        | 39.59        | 0.2%        |
| US GDP (billion 1992 dollars)              | 7552         | 7991         | 8191         | 8377         | 8596         | 8824         | 9056         | 9251         | 9449         | 9651         | 9840         | 10054        | 10218        | 10416        | 10648        | 10906        | 11147        | 11331        | 11533        | 11741        | 11959        | 12179        | 2.2%        |
| Total Carbon Emis.(mill. m. tons)          | 1485.4       | 1552.4       | 1575.6       | 1599.5       | 1628.5       | 1657.5       | 1683.4       | 1707.8       | 1730.6       | 1750.9       | 1767.1       | 1786.6       | 1802.6       | 1821.3       | 1842.3       | 1865.8       | 1893.4       | 1908.8       | 1927.8       | 1944.7       | 1961.6       | 1979.2       | 1.3%        |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10

percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 3. Energy Consumption by Sector and Source (1 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**03 - East North Central**

1998 -

|                            | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Energy Consumption         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Residential                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | -1.5% |
| Kerosene                   | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.8% |
| Liquefied Petroleum Gas    | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.1%  |
| Petroleum Subtotal         | 0.20 | 0.20 | 0.20 | 0.20 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | -0.6% |
| Natural Gas                | 1.42 | 1.54 | 1.53 | 1.53 | 1.53 | 1.53 | 1.53 | 1.53 | 1.53 | 1.53 | 1.53 | 1.54 | 1.54 | 1.55 | 1.55 | 1.55 | 1.56 | 1.57 | 1.57 | 1.57 | 1.58 | 1.59 | 0.5%  |
| Coal                       | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.6% |
| Renewable Energy 1/        | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 1.3%  |
| Electricity                | 0.57 | 0.60 | 0.60 | 0.61 | 0.62 | 0.64 | 0.65 | 0.65 | 0.66 | 0.68 | 0.69 | 0.69 | 0.70 | 0.71 | 0.72 | 0.73 | 0.73 | 0.74 | 0.75 | 0.75 | 0.76 | 0.77 | 1.4%  |
| Delivered Energy           | 2.23 | 2.39 | 2.39 | 2.40 | 2.41 | 2.42 | 2.42 | 2.43 | 2.44 | 2.45 | 2.46 | 2.47 | 2.48 | 2.50 | 2.50 | 2.51 | 2.52 | 2.54 | 2.54 | 2.55 | 2.57 | 2.59 | 0.7%  |
| Electricity Related Losses | 1.22 | 1.28 | 1.33 | 1.36 | 1.40 | 1.40 | 1.43 | 1.43 | 1.44 | 1.47 | 1.50 | 1.52 | 1.54 | 1.56 | 1.56 | 1.59 | 1.60 | 1.62 | 1.63 | 1.63 | 1.65 | 1.66 | 1.4%  |
| Total                      | 3.45 | 3.67 | 3.72 | 3.76 | 3.81 | 3.82 | 3.85 | 3.86 | 3.88 | 3.93 | 3.96 | 3.99 | 4.02 | 4.06 | 4.06 | 4.10 | 4.12 | 4.16 | 4.17 | 4.18 | 4.22 | 4.25 | 1.0%  |
| Commercial                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.1%  |
| Residual Fuel              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.3%  |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.1% |
| Liquefied Petroleum Gas    | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.7%  |
| Motor Gasoline 2/          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Petroleum Subtotal         | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.3%  |
| Natural Gas                | 0.78 | 0.81 | 0.82 | 0.82 | 0.83 | 0.83 | 0.84 | 0.84 | 0.84 | 0.85 | 0.86 | 0.86 | 0.87 | 0.87 | 0.88 | 0.88 | 0.88 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.6%  |
| Coal                       | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.7%  |
| Renewable Energy 3/        | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.0%  |
| Electricity                | 0.56 | 0.58 | 0.59 | 0.60 | 0.61 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.66 | 0.66 | 0.67 | 0.68 | 0.68 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.70 | 0.70 | 1.0%  |
| Delivered Energy           | 1.43 | 1.49 | 1.51 | 1.52 | 1.53 | 1.54 | 1.56 | 1.57 | 1.58 | 1.60 | 1.61 | 1.63 | 1.64 | 1.65 | 1.66 | 1.67 | 1.68 | 1.68 | 1.68 | 1.69 | 1.69 | 1.69 | 0.7%  |
| Electricity Related Losses | 1.21 | 1.25 | 1.29 | 1.32 | 1.35 | 1.35 | 1.38 | 1.37 | 1.39 | 1.41 | 1.44 | 1.45 | 1.47 | 1.48 | 1.48 | 1.50 | 1.51 | 1.51 | 1.51 | 1.50 | 1.51 | 1.51 | 1.0%  |
| Total                      | 2.64 | 2.75 | 2.80 | 2.84 | 2.89 | 2.89 | 2.93 | 2.94 | 2.97 | 3.01 | 3.05 | 3.08 | 3.12 | 3.14 | 3.15 | 3.17 | 3.18 | 3.19 | 3.20 | 3.19 | 3.20 | 3.19 | 0.9%  |
| Industrial 4/              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 1.4%  |
| Liquefied Petroleum Gas    | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.9%  |
| Petrochemical Feedstocks   | 0.18 | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.23 | 0.9%  |
| Residual Fuel              | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.7%  |
| Motor Gasoline 2/          | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 1.3%  |
| Other Petroleum 5/         | 0.64 | 0.69 | 0.70 | 0.71 | 0.71 | 0.71 | 0.72 | 0.72 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.75 | 0.75 | 0.76 | 0.77 | 0.77 | 0.78 | 0.78 | 0.79 | 0.79 | 1.0%  |
| Petroleum Subtotal         | 1.15 | 1.20 | 1.21 | 1.23 | 1.24 | 1.26 | 1.27 | 1.29 | 1.30 | 1.31 | 1.32 | 1.33 | 1.33 | 1.34 | 1.35 | 1.37 | 1.39 | 1.39 | 1.40 | 1.41 | 1.43 | 1.44 | 1.0%  |
| Natural Gas 6/             | 1.41 | 1.45 | 1.46 | 1.48 | 1.52 | 1.56 | 1.59 | 1.62 | 1.64 | 1.65 | 1.66 | 1.68 | 1.69 | 1.70 | 1.72 | 1.74 | 1.76 | 1.77 | 1.78 | 1.80 | 1.81 | 1.83 | 1.2%  |
| Metallurgical Coal         | 0.27 | 0.26 | 0.26 | 0.26 | 0.25 | 0.25 | 0.25 | 0.24 | 0.24 | 0.24 | 0.23 | 0.23 | 0.22 | 0.22 | 0.22 | 0.21 | 0.21 | 0.21 | 0.20 | 0.20 | 0.20 | 0.19 | -1.6% |
| Steam Coal                 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.2%  |
| Net Coal Coke Imports      | 0.02 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 6.4%  |
| Coal Subtotal              | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.70 | 0.70 | 0.70 | 0.69 | 0.69 | 0.69 | 0.69 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | -0.1% |
| Renewable Energy 7/        | 0.36 | 0.37 | 0.38 | 0.39 | 0.40 | 0.40 | 0.41 | 0.42 | 0.42 | 0.43 | 0.43 | 0.44 | 0.44 | 0.44 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.48 | 0.49 | 0.49 | 1.4%  |
| Electricity                | 0.76 | 0.76 | 0.76 | 0.77 | 0.79 | 0.81 | 0.82 | 0.83 | 0.84 | 0.85 | 0.86 | 0.86 | 0.87 | 0.88 | 0.89 | 0.91 | 0.92 | 0.93 | 0.94 | 0.94 | 0.96 | 0.97 | 1.1%  |
| Delivered Energy           | 4.37 | 4.47 | 4.50 | 4.56 | 4.64 | 4.72 | 4.80 | 4.85 | 4.90 | 4.94 | 4.96 | 5.00 | 5.01 | 5.05 | 5.11 | 5.16 | 5.22 | 5.24 | 5.27 | 5.31 | 5.36 | 5.41 | 1.0%  |
| Electricity Related Losses | 1.64 | 1.64 | 1.67 | 1.71 | 1.77 | 1.77 | 1.82 | 1.81 | 1.83 | 1.86 | 1.87 | 1.89 | 1.91 | 1.93 | 1.94 | 1.98 | 2.01 | 2.02 | 2.04 | 2.04 | 2.07 | 2.09 | 1.1%  |
| Total                      | 6.01 | 6.11 | 6.17 | 6.26 | 6.41 | 6.49 | 6.62 | 6.67 | 6.73 | 6.79 | 6.83 | 6.89 | 6.93 | 6.98 | 7.05 | 7.15 | 7.23 | 7.26 | 7.32 | 7.35 | 7.43 | 7.50 | 1.0%  |

**Table 3. Energy Consumption by Sector and Source (2 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**03 - East North Central**

1998-

|  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020   |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Transportation                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Distillate Fuel                          | 0.79  | 0.81  | 0.81  | 0.82  | 0.83  | 0.84  | 0.85  | 0.85  | 0.86  | 0.86  | 0.86  | 0.86  | 0.86  | 0.86  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.5%   |
| Jet Fuel 8/                              | 0.27  | 0.29  | 0.30  | 0.30  | 0.31  | 0.32  | 0.33  | 0.34  | 0.35  | 0.36  | 0.37  | 0.38  | 0.38  | 0.39  | 0.40  | 0.41  | 0.41  | 0.42  | 0.43  | 0.44  | 0.45  | 0.45  | 2.3%   |
| Motor Gasoline 2/                        | 2.50  | 2.59  | 2.63  | 2.68  | 2.70  | 2.75  | 2.78  | 2.83  | 2.86  | 2.90  | 2.93  | 2.96  | 2.98  | 3.00  | 3.02  | 3.05  | 3.08  | 3.09  | 3.11  | 3.12  | 3.14  | 3.16  | 1.1%   |
| Residual Fuel                            | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 2.0%   |
| Liquefied Petroleum Gas                  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 4.3%   |
| Other Petroleum 9/                       | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.4%   |
| Petroleum Subtotal                       | 3.62  | 3.74  | 3.80  | 3.86  | 3.91  | 3.98  | 4.03  | 4.09  | 4.14  | 4.18  | 4.22  | 4.26  | 4.29  | 4.32  | 4.36  | 4.40  | 4.43  | 4.46  | 4.48  | 4.51  | 4.53  | 4.56  | 1.1%   |
| Pipeline Fuel Natural Gas                | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.7%   |
| Compressed Natural Gas                   | 0.00  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 12.5%  |
| Renewables (E85) 10/                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 15.9%  |
| Methanol (M85) 11/                       | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 13.9%  |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A    |
| Electricity                              | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 3.8%   |
| Delivered Energy                         | 3.71  | 3.84  | 3.91  | 3.97  | 4.03  | 4.10  | 4.16  | 4.22  | 4.28  | 4.33  | 4.37  | 4.42  | 4.45  | 4.49  | 4.53  | 4.57  | 4.62  | 4.64  | 4.67  | 4.70  | 4.72  | 4.75  | 1.1%   |
| Electricity Related Losses               | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 3.8%   |
| Total                                    | 3.73  | 3.87  | 3.93  | 4.00  | 4.06  | 4.13  | 4.19  | 4.26  | 4.32  | 4.37  | 4.41  | 4.46  | 4.50  | 4.53  | 4.57  | 4.62  | 4.67  | 4.69  | 4.72  | 4.75  | 4.78  | 4.80  | 1.2%   |
| Delivered Energy Consumption All Sectors |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Distillate Fuel                          | 1.06  | 1.08  | 1.09  | 1.10  | 1.11  | 1.12  | 1.13  | 1.14  | 1.14  | 1.14  | 1.14  | 1.14  | 1.14  | 1.15  | 1.15  | 1.16  | 1.16  | 1.16  | 1.17  | 1.17  | 1.17  | 1.17  | 0.5%   |
| Kerosene                                 | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | -0.7%  |
| Jet Fuel 8/                              | 0.27  | 0.29  | 0.30  | 0.30  | 0.31  | 0.32  | 0.33  | 0.34  | 0.35  | 0.36  | 0.37  | 0.38  | 0.38  | 0.39  | 0.40  | 0.41  | 0.41  | 0.42  | 0.43  | 0.44  | 0.45  | 0.45  | 2.3%   |
| Liquefied Petroleum Gas                  | 0.25  | 0.26  | 0.26  | 0.27  | 0.27  | 0.27  | 0.27  | 0.28  | 0.28  | 0.28  | 0.28  | 0.28  | 0.28  | 0.29  | 0.29  | 0.29  | 0.29  | 0.29  | 0.29  | 0.29  | 0.29  | 0.29  | 0.8%   |
| Motor Gasoline 2/                        | 2.54  | 2.62  | 2.67  | 2.71  | 2.74  | 2.79  | 2.82  | 2.87  | 2.90  | 2.94  | 2.97  | 3.00  | 3.02  | 3.04  | 3.07  | 3.09  | 3.12  | 3.14  | 3.15  | 3.17  | 3.19  | 3.20  | 1.1%   |
| Petrochemical Feedstocks                 | 0.18  | 0.17  | 0.18  | 0.18  | 0.18  | 0.19  | 0.19  | 0.20  | 0.20  | 0.20  | 0.20  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.23  | 0.9%   |
| Residual Fuel                            | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.9%   |
| Other Petroleum 12/                      | 0.68  | 0.73  | 0.74  | 0.75  | 0.75  | 0.76  | 0.76  | 0.77  | 0.78  | 0.78  | 0.78  | 0.79  | 0.79  | 0.79  | 0.80  | 0.81  | 0.81  | 0.82  | 0.82  | 0.83  | 0.83  | 0.84  | 1.0%   |
| Petroleum Subtotal                       | 5.02  | 5.20  | 5.28  | 5.35  | 5.41  | 5.49  | 5.56  | 5.63  | 5.70  | 5.75  | 5.79  | 5.84  | 5.87  | 5.91  | 5.95  | 6.01  | 6.06  | 6.09  | 6.12  | 6.16  | 6.19  | 6.23  | 1.0%   |
| Natural Gas 6/                           | 3.68  | 3.88  | 3.89  | 3.92  | 3.97  | 4.02  | 4.06  | 4.09  | 4.11  | 4.15  | 4.16  | 4.19  | 4.21  | 4.24  | 4.27  | 4.30  | 4.33  | 4.35  | 4.37  | 4.39  | 4.41  | 4.44  | 0.8%   |
| Metallurgical Coal                       | 0.27  | 0.26  | 0.26  | 0.26  | 0.25  | 0.25  | 0.25  | 0.24  | 0.24  | 0.24  | 0.23  | 0.23  | 0.22  | 0.22  | 0.22  | 0.21  | 0.21  | 0.21  | 0.20  | 0.20  | 0.20  | 0.19  | -1.6%  |
| Steam Coal                               | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.2%   |
| Net Coal Coke Imports                    | 0.02  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 6.4%   |
| Coal Subtotal                            | 0.73  | 0.73  | 0.73  | 0.73  | 0.73  | 0.73  | 0.74  | 0.74  | 0.74  | 0.73  | 0.73  | 0.73  | 0.73  | 0.73  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | -0.1%  |
| Renewable Energy 13/                     | 0.41  | 0.43  | 0.44  | 0.44  | 0.45  | 0.46  | 0.47  | 0.48  | 0.48  | 0.49  | 0.49  | 0.50  | 0.50  | 0.51  | 0.52  | 0.52  | 0.53  | 0.54  | 0.54  | 0.55  | 0.55  | 0.56  | 1.5%   |
| Methanol (M85) 11/                       | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 13.9%  |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A    |
| Electricity                              | 1.90  | 1.95  | 1.97  | 2.00  | 2.04  | 2.07  | 2.11  | 2.13  | 2.16  | 2.19  | 2.22  | 2.24  | 2.26  | 2.29  | 2.31  | 2.34  | 2.36  | 2.38  | 2.40  | 2.42  | 2.44  | 2.47  | 1.2%   |
| Delivered Energy                         | 11.74 | 12.19 | 12.30 | 12.45 | 12.61 | 12.78 | 12.94 | 13.08 | 13.20 | 13.32 | 13.40 | 13.52 | 13.59 | 13.69 | 13.80 | 13.92 | 14.03 | 14.11 | 14.17 | 14.25 | 14.34 | 14.43 | 0.9%   |
| Electricity Related Losses               | 4.10  | 4.20  | 4.31  | 4.41  | 4.56  | 4.56  | 4.65  | 4.65  | 4.70  | 4.78  | 4.85  | 4.91  | 4.98  | 5.01  | 5.03  | 5.12  | 5.17  | 5.21  | 5.24  | 5.22  | 5.28  | 5.32  | 1.2%   |
| Total                                    | 15.84 | 16.39 | 16.61 | 16.86 | 17.16 | 17.34 | 17.59 | 17.72 | 17.90 | 18.10 | 18.26 | 18.42 | 18.57 | 18.70 | 18.83 | 19.04 | 19.20 | 19.31 | 19.41 | 19.47 | 19.62 | 19.75 | 1.0%   |
| Electric Generators 14/                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Distillate Fuel                          | 0.02  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | -2.2%  |
| Residual Fuel                            | 0.02  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -13.6% |
| Petroleum Subtotal                       | 0.04  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | -5.4%  |
| Natural Gas                              | 0.14  | 0.28  | 0.22  | 0.23  | 0.24  | 0.18  | 0.25  | 0.26  | 0.36  | 0.44  | 0.50  | 0.57  | 0.64  | 0.68  | 0.73  | 0.79  | 0.92  | 0.96  | 1.09  | 1.20  | 1.24  | 1.27  | 10.4%  |
| Steam Coal                               | 4.41  | 4.39  | 4.57  | 4.66  | 4.84  | 4.94  | 5.00  | 5.03  | 5.07  | 5.13  | 5.16  | 5.18  | 5.23  | 5.27  | 5.35  | 5.41  | 5.49  | 5.51  | 5.55  | 5.56  | 5.61  | 5.64  | 1.1%   |
| Nuclear Power                            | 1.24  | 1.27  | 1.27  | 1.27  | 1.28  | 1.28  | 1.29  | 1.26  | 1.22  | 1.21  | 1.22  | 1.22  | 1.19  | 1.19  | 1.11  | 1.11  | 0.98  | 0.96  | 0.83  | 0.71  | 0.71  | 0.71  | -2.5%  |
| Renewable Energy 15/                     | 0.07  | 0.08  | 0.09  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.08  | 0.09  | 0.09  | 0.7%   |
| Electricity Imports 16/                  | 0.09  | 0.12  | 0.12  | 0.15  | 0.15  | 0.14  | 0.13  | 0.14  | 0.12  | 0.10  | 0.09  | 0.08  | 0.08  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.06  | -1.8%  |
| Total                                    | 6.00  | 6.15  | 6.28  | 6.41  | 6.59  | 6.62  | 6.76  | 6.78  | 6.86  | 6.97  | 7.07  | 7.15  | 7.24  | 7.30  | 7.35  | 7.46  | 7.54  | 7.59  | 7.64  | 7.63  | 7.73  | 7.78  | 1.2%   |

**Table 3. Energy Consumption by Sector and Source (3 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**03 - East North Central**

1998 -

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2020        |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Total Energy Consumption</b>            |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Distillate Fuel                            | 1.08         | 1.09         | 1.09         | 1.11         | 1.12         | 1.13         | 1.14         | 1.14         | 1.15         | 1.15         | 1.15         | 1.15         | 1.15         | 1.15         | 1.16         | 1.17         | 1.17         | 1.18         | 1.18         | 1.18         | 1.18         | 1.18         | 0.4%        |
| Kerosene                                   | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | -0.7%       |
| Jet Fuel 8/                                | 0.27         | 0.29         | 0.30         | 0.30         | 0.31         | 0.32         | 0.33         | 0.34         | 0.35         | 0.36         | 0.37         | 0.38         | 0.38         | 0.39         | 0.40         | 0.41         | 0.41         | 0.42         | 0.43         | 0.44         | 0.45         | 0.45         | 2.3%        |
| Liquefied Petroleum Gas                    | 0.25         | 0.26         | 0.26         | 0.27         | 0.27         | 0.27         | 0.27         | 0.28         | 0.28         | 0.28         | 0.28         | 0.28         | 0.28         | 0.29         | 0.29         | 0.29         | 0.29         | 0.29         | 0.29         | 0.29         | 0.29         | 0.29         | 0.8%        |
| Motor Gasoline 2/                          | 2.54         | 2.62         | 2.67         | 2.71         | 2.74         | 2.79         | 2.82         | 2.87         | 2.90         | 2.94         | 2.97         | 3.00         | 3.02         | 3.04         | 3.07         | 3.09         | 3.12         | 3.14         | 3.15         | 3.17         | 3.19         | 3.20         | 1.1%        |
| Petrochemical Feedstocks                   | 0.18         | 0.17         | 0.18         | 0.18         | 0.18         | 0.19         | 0.19         | 0.20         | 0.20         | 0.20         | 0.20         | 0.21         | 0.21         | 0.21         | 0.21         | 0.21         | 0.22         | 0.22         | 0.22         | 0.22         | 0.22         | 0.23         | 0.9%        |
| Residual Fuel                              | 0.04         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | -2.1%       |
| Other Petroleum 12/                        | 0.68         | 0.73         | 0.74         | 0.75         | 0.75         | 0.76         | 0.76         | 0.77         | 0.78         | 0.78         | 0.78         | 0.79         | 0.79         | 0.79         | 0.80         | 0.81         | 0.81         | 0.82         | 0.82         | 0.83         | 0.83         | 0.84         | 1.0%        |
| Petroleum Subtotal                         | 5.06         | 5.22         | 5.29         | 5.36         | 5.41         | 5.50         | 5.57         | 5.63         | 5.70         | 5.75         | 5.79         | 5.85         | 5.88         | 5.92         | 5.96         | 6.02         | 6.07         | 6.11         | 6.14         | 6.17         | 6.21         | 6.24         | 1.0%        |
| Natural Gas                                | 3.83         | 4.16         | 4.12         | 4.15         | 4.21         | 4.19         | 4.31         | 4.35         | 4.48         | 4.58         | 4.66         | 4.76         | 4.85         | 4.92         | 4.99         | 5.08         | 5.25         | 5.31         | 5.45         | 5.58         | 5.65         | 5.71         | 1.8%        |
| Metallurgical Coal                         | 0.27         | 0.26         | 0.26         | 0.26         | 0.25         | 0.25         | 0.25         | 0.24         | 0.24         | 0.24         | 0.23         | 0.23         | 0.22         | 0.22         | 0.22         | 0.21         | 0.21         | 0.21         | 0.20         | 0.20         | 0.20         | 0.19         | -1.6%       |
| Steam Coal                                 | 4.84         | 4.83         | 5.01         | 5.10         | 5.28         | 5.39         | 5.45         | 5.48         | 5.51         | 5.57         | 5.61         | 5.63         | 5.68         | 5.72         | 5.80         | 5.86         | 5.94         | 5.96         | 6.01         | 6.02         | 6.06         | 6.10         | 1.1%        |
| Net Coal Coke Imports                      | 0.02         | 0.03         | 0.03         | 0.03         | 0.04         | 0.04         | 0.04         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.07         | 0.07         | 0.07         | 6.4%        |
| Coal Subtotal                              | 5.13         | 5.12         | 5.30         | 5.39         | 5.57         | 5.68         | 5.74         | 5.77         | 5.80         | 5.86         | 5.89         | 5.91         | 5.96         | 6.00         | 6.08         | 6.13         | 6.21         | 6.23         | 6.27         | 6.28         | 6.33         | 6.36         | 1.0%        |
| Nuclear Power                              | 1.24         | 1.27         | 1.27         | 1.27         | 1.28         | 1.28         | 1.29         | 1.26         | 1.22         | 1.21         | 1.22         | 1.22         | 1.19         | 1.19         | 1.11         | 1.11         | 0.98         | 0.96         | 0.83         | 0.71         | 0.71         | 0.71         | -2.5%       |
| Renewable Energy 17/                       | 0.48         | 0.51         | 0.52         | 0.52         | 0.53         | 0.54         | 0.55         | 0.56         | 0.57         | 0.57         | 0.58         | 0.59         | 0.60         | 0.60         | 0.60         | 0.61         | 0.62         | 0.62         | 0.63         | 0.63         | 0.64         | 0.65         | 1.4%        |
| Methanol (M85) 11/                         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 13.9%       |
| Liquid Hydrogen                            | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Electricity Imports 16/                    | 0.09         | 0.12         | 0.12         | 0.15         | 0.15         | 0.14         | 0.13         | 0.14         | 0.12         | 0.10         | 0.09         | 0.08         | 0.08         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.07         | 0.07         | 0.06         | -1.8%       |
| <b>Total</b>                               | <b>15.84</b> | <b>16.39</b> | <b>16.61</b> | <b>16.86</b> | <b>17.16</b> | <b>17.34</b> | <b>17.59</b> | <b>17.72</b> | <b>17.90</b> | <b>18.10</b> | <b>18.26</b> | <b>18.42</b> | <b>18.57</b> | <b>18.70</b> | <b>18.83</b> | <b>19.04</b> | <b>19.20</b> | <b>19.31</b> | <b>19.41</b> | <b>19.47</b> | <b>19.62</b> | <b>19.75</b> | <b>1.0%</b> |
| <b>Energy Use &amp; Related Statistics</b> |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Delivered Energy Use                       | 11.74        | 12.19        | 12.30        | 12.45        | 12.61        | 12.78        | 12.94        | 13.08        | 13.20        | 13.32        | 13.40        | 13.52        | 13.59        | 13.69        | 13.80        | 13.92        | 14.03        | 14.11        | 14.17        | 14.25        | 14.34        | 14.43        | 0.9%        |
| Total Energy Use                           | 15.84        | 16.39        | 16.61        | 16.86        | 17.16        | 17.34        | 17.59        | 17.72        | 17.90        | 18.10        | 18.26        | 18.42        | 18.57        | 18.70        | 18.83        | 19.04        | 19.20        | 19.31        | 19.41        | 19.47        | 19.62        | 19.75        | 1.0%        |
| Population (millions)                      | 44.22        | 44.57        | 44.75        | 44.94        | 45.13        | 45.31        | 45.49        | 45.68        | 45.87        | 46.03        | 46.18        | 46.34        | 46.49        | 46.64        | 46.78        | 46.92        | 47.05        | 47.16        | 47.28        | 47.39        | 47.49        | 47.58        | 0.3%        |
| US GDP (billion 1992 dollars)              | 7552         | 7991         | 8191         | 8377         | 8596         | 8824         | 9056         | 9251         | 9449         | 9651         | 9840         | 10054        | 10218        | 10416        | 10648        | 10906        | 11147        | 11331        | 11533        | 11741        | 11959        | 12179        | 2.2%        |
| Total Carbon Emis.(mill. m. tons)          | 1485.4       | 1552.4       | 1575.6       | 1599.5       | 1628.5       | 1657.5       | 1683.4       | 1707.8       | 1730.6       | 1750.9       | 1767.1       | 1786.6       | 1802.6       | 1821.3       | 1842.3       | 1865.8       | 1893.4       | 1908.8       | 1927.8       | 1944.7       | 1961.6       | 1979.2       | 1.3%        |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10

percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 4. Energy Consumption by Sector and Source (1 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**04 - West North Central**

1998 -

|                            | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <b>Energy Consumption</b>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| <b>Residential</b>         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | -1.7% |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.2% |
| Liquefied Petroleum Gas    | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | -1.3% |
| Petroleum Subtotal         | 0.10 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | -1.4% |
| Natural Gas                | 0.44 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.50 | 0.50 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 0.51 | 0.52 | 0.52 | 0.52 | 0.52 | 0.53 | 0.53 | 0.8%  |
| Coal                       | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.5% |
| Renewable Energy 1/        | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.2%  |
| Electricity                | 0.29 | 0.30 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 0.33 | 0.33 | 0.33 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.38 | 1.3%  |
| Delivered Energy           | 0.86 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 | 0.95 | 0.95 | 0.95 | 0.96 | 0.96 | 0.96 | 0.97 | 0.98 | 0.98 | 0.98 | 0.99 | 1.00 | 1.00 | 1.00 | 1.01 | 1.02 | 0.7%  |
| Electricity Related Losses | 0.76 | 0.82 | 0.85 | 0.87 | 0.89 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 1.0%  |
| Total                      | 1.62 | 1.76 | 1.78 | 1.81 | 1.83 | 1.86 | 1.86 | 1.87 | 1.87 | 1.88 | 1.88 | 1.89 | 1.89 | 1.90 | 1.90 | 1.90 | 1.92 | 1.93 | 1.94 | 1.94 | 1.95 | 1.96 | 0.9%  |
| <b>Commercial</b>          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.2%  |
| Residual Fuel              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.4%  |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.1% |
| Liquefied Petroleum Gas    | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.8%  |
| Motor Gasoline 2/          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Petroleum Subtotal         | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.4%  |
| Natural Gas                | 0.34 | 0.35 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.37 | 0.37 | 0.38 | 0.38 | 0.38 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.7%  |
| Coal                       | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.7%  |
| Renewable Energy 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0%  |
| Electricity                | 0.24 | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 1.1%  |
| Delivered Energy           | 0.63 | 0.66 | 0.67 | 0.68 | 0.68 | 0.69 | 0.69 | 0.70 | 0.70 | 0.71 | 0.72 | 0.72 | 0.73 | 0.74 | 0.74 | 0.75 | 0.75 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.8%  |
| Electricity Related Losses | 0.65 | 0.70 | 0.72 | 0.75 | 0.76 | 0.78 | 0.78 | 0.79 | 0.79 | 0.79 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 0.79 | 0.80 | 0.80 | 0.80 | 0.80 | 0.79 | 0.79 | 0.9%  |
| Total                      | 1.28 | 1.36 | 1.40 | 1.43 | 1.44 | 1.47 | 1.48 | 1.49 | 1.50 | 1.50 | 1.52 | 1.52 | 1.53 | 1.53 | 1.54 | 1.54 | 1.55 | 1.55 | 1.56 | 1.55 | 1.54 | 1.54 | 0.8%  |
| <b>Industrial 4/</b>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.17 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.23 | 1.4%  |
| Liquefied Petroleum Gas    | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 1.0%  |
| Petrochemical Feedstocks   | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.9%  |
| Residual Fuel              | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.7%  |
| Motor Gasoline 2/          | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 1.3%  |
| Other Petroleum 5/         | 0.26 | 0.28 | 0.28 | 0.29 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.30 | 0.31 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 0.33 | 0.33 | 0.33 | 0.34 | 1.2%  |
| Petroleum Subtotal         | 0.58 | 0.61 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.66 | 0.67 | 0.67 | 0.68 | 0.68 | 0.69 | 0.69 | 0.70 | 0.71 | 0.72 | 0.73 | 0.73 | 0.74 | 0.75 | 0.76 | 1.2%  |
| Natural Gas 6/             | 0.48 | 0.50 | 0.50 | 0.50 | 0.51 | 0.52 | 0.54 | 0.55 | 0.57 | 0.58 | 0.58 | 0.60 | 0.60 | 0.61 | 0.62 | 0.62 | 0.63 | 0.64 | 0.64 | 0.65 | 0.67 | 0.68 | 1.6%  |
| Metallurgical Coal         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Steam Coal                 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.24 | 0.2%  |
| Net Coal Coke Imports      | 0.02 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 6.4%  |
| Coal Subtotal              | 0.24 | 0.25 | 0.26 | 0.26 | 0.26 | 0.27 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.31 | 1.0%  |
| Renewable Energy 7/        | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 1.2%  |
| Electricity                | 0.27 | 0.27 | 0.27 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.30 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 0.33 | 0.33 | 0.33 | 0.34 | 1.1%  |
| Delivered Energy           | 1.70 | 1.76 | 1.77 | 1.79 | 1.82 | 1.86 | 1.89 | 1.92 | 1.95 | 1.97 | 1.99 | 2.01 | 2.03 | 2.05 | 2.07 | 2.10 | 2.13 | 2.14 | 2.16 | 2.18 | 2.21 | 2.25 | 1.3%  |
| Electricity Related Losses | 0.70 | 0.72 | 0.73 | 0.76 | 0.79 | 0.81 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.83 | 0.81 | 0.81 | 0.82 | 0.82 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.85 | 0.9%  |
| Total                      | 2.40 | 2.48 | 2.50 | 2.55 | 2.61 | 2.66 | 2.71 | 2.74 | 2.77 | 2.80 | 2.81 | 2.84 | 2.84 | 2.86 | 2.89 | 2.92 | 2.96 | 2.98 | 3.00 | 3.03 | 3.06 | 3.09 | 1.2%  |

**Table 4. Energy Consumption by Sector and Source (2 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**04 - West North Central**

1998-

|  | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Transportation                           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                          | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.55 | 0.56 | 0.56 | 0.57 | 0.57 | 0.57 | 0.58 | 0.58 | 0.58 | 0.58 | 0.59 | 0.59 | 0.59 | 0.59 | 0.60 | 0.60 | 0.60 | 0.8%  |
| Jet Fuel 8/                              | 0.16 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.27 | 2.4%  |
| Motor Gasoline 2/                        | 1.22 | 1.27 | 1.29 | 1.32 | 1.33 | 1.36 | 1.37 | 1.40 | 1.42 | 1.43 | 1.45 | 1.47 | 1.48 | 1.50 | 1.51 | 1.53 | 1.54 | 1.55 | 1.56 | 1.57 | 1.58 | 1.59 | 1.2%  |
| Residual Fuel                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.3%  |
| Liquefied Petroleum Gas                  | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 4.7%  |
| Other Petroleum 9/                       | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.7%  |
| Petroleum Subtotal                       | 1.92 | 1.99 | 2.02 | 2.06 | 2.09 | 2.13 | 2.16 | 2.19 | 2.22 | 2.25 | 2.27 | 2.30 | 2.32 | 2.34 | 2.37 | 2.39 | 2.42 | 2.43 | 2.45 | 2.47 | 2.48 | 2.50 | 1.2%  |
| Pipeline Fuel Natural Gas                | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 1.6%  |
| Compressed Natural Gas                   | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 12.9% |
| Renewables (E85) 10/                     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 16.1% |
| Methanol (M85) 11/                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 14.1% |
| Liquid Hydrogen                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Electricity                              | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 4.0%  |
| Delivered Energy                         | 2.01 | 2.10 | 2.14 | 2.17 | 2.21 | 2.25 | 2.28 | 2.32 | 2.35 | 2.39 | 2.41 | 2.45 | 2.47 | 2.49 | 2.52 | 2.55 | 2.58 | 2.60 | 2.61 | 2.64 | 2.65 | 2.67 | 1.3%  |
| Electricity Related Losses               | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 3.7%  |
| Total                                    | 2.02 | 2.11 | 2.15 | 2.19 | 2.22 | 2.27 | 2.30 | 2.34 | 2.37 | 2.41 | 2.43 | 2.47 | 2.49 | 2.52 | 2.54 | 2.57 | 2.60 | 2.62 | 2.64 | 2.66 | 2.68 | 2.70 | 1.3%  |
| Delivered Energy Consumption All Sectors |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                          | 0.73 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.80 | 0.81 | 0.82 | 0.82 | 0.83 | 0.83 | 0.83 | 0.84 | 0.85 | 0.85 | 0.86 | 0.86 | 0.87 | 0.87 | 0.87 | 0.88 | 0.8%  |
| Kerosene                                 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Jet Fuel 8/                              | 0.16 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.27 | 0.27 | 2.4%  |
| Liquefied Petroleum Gas                  | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.3%  |
| Motor Gasoline 2/                        | 1.26 | 1.31 | 1.33 | 1.35 | 1.37 | 1.40 | 1.42 | 1.44 | 1.46 | 1.48 | 1.49 | 1.51 | 1.53 | 1.54 | 1.56 | 1.57 | 1.59 | 1.60 | 1.61 | 1.62 | 1.63 | 1.64 | 1.2%  |
| Petrochemical Feedstocks                 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.9%  |
| Residual Fuel                            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.7%  |
| Other Petroleum 12/                      | 0.28 | 0.30 | 0.31 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.36 | 1.1%  |
| Petroleum Subtotal                       | 2.64 | 2.74 | 2.78 | 2.82 | 2.86 | 2.90 | 2.94 | 2.98 | 3.02 | 3.05 | 3.08 | 3.11 | 3.13 | 3.16 | 3.19 | 3.22 | 3.26 | 3.28 | 3.30 | 3.32 | 3.35 | 3.37 | 1.1%  |
| Natural Gas 6/                           | 1.35 | 1.45 | 1.45 | 1.46 | 1.47 | 1.49 | 1.51 | 1.53 | 1.55 | 1.57 | 1.58 | 1.60 | 1.62 | 1.63 | 1.64 | 1.66 | 1.67 | 1.69 | 1.70 | 1.71 | 1.73 | 1.75 | 1.2%  |
| Metallurgical Coal                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Steam Coal                               | 0.24 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.2%  |
| Net Coal Coke Imports                    | 0.02 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 6.4%  |
| Coal Subtotal                            | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 1.0%  |
| Renewable Energy 13/                     | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 1.1%  |
| Methanol (M85) 11/                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 14.1% |
| Liquid Hydrogen                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Electricity                              | 0.80 | 0.83 | 0.84 | 0.85 | 0.86 | 0.88 | 0.89 | 0.90 | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 | 0.97 | 0.98 | 0.99 | 1.00 | 1.01 | 1.01 | 1.02 | 1.03 | 1.04 | 1.2%  |
| Delivered Energy                         | 5.21 | 5.45 | 5.51 | 5.58 | 5.65 | 5.74 | 5.82 | 5.89 | 5.96 | 6.03 | 6.08 | 6.15 | 6.20 | 6.26 | 6.31 | 6.38 | 6.45 | 6.49 | 6.53 | 6.58 | 6.64 | 6.70 | 1.1%  |
| Electricity Related Losses               | 2.12 | 2.26 | 2.32 | 2.40 | 2.45 | 2.52 | 2.53 | 2.55 | 2.55 | 2.56 | 2.57 | 2.57 | 2.55 | 2.55 | 2.56 | 2.55 | 2.59 | 2.60 | 2.60 | 2.60 | 2.60 | 2.60 | 0.9%  |
| Total                                    | 7.33 | 7.71 | 7.83 | 7.98 | 8.11 | 8.25 | 8.35 | 8.44 | 8.51 | 8.59 | 8.65 | 8.72 | 8.75 | 8.81 | 8.88 | 8.93 | 9.04 | 9.09 | 9.13 | 9.18 | 9.23 | 9.29 | 1.1%  |
| Electric Generators 14/                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                          | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.1% |
| Residual Fuel                            | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -4.6% |
| Petroleum Subtotal                       | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -3.0% |
| Natural Gas                              | 0.08 | 0.06 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.06 | 0.07 | 0.08 | 0.09 | 0.11 | 0.13 | 0.14 | 0.16 | 0.19 | 0.24 | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 5.9%  |
| Steam Coal                               | 2.19 | 2.39 | 2.47 | 2.56 | 2.64 | 2.77 | 2.80 | 2.81 | 2.82 | 2.82 | 2.83 | 2.83 | 2.84 | 2.84 | 2.84 | 2.85 | 2.86 | 2.86 | 2.86 | 2.86 | 2.87 | 2.87 | 1.2%  |
| Nuclear Power                            | 0.45 | 0.45 | 0.45 | 0.45 | 0.44 | 0.38 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.36 | 0.32 | 0.32 | 0.32 | 0.29 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.27 | -2.2% |
| Renewable Energy 15/                     | 0.18 | 0.18 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.6%  |
| Electricity Imports 16/                  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Total                                    | 2.92 | 3.09 | 3.16 | 3.25 | 3.32 | 3.39 | 3.42 | 3.45 | 3.46 | 3.48 | 3.50 | 3.51 | 3.50 | 3.52 | 3.54 | 3.54 | 3.59 | 3.60 | 3.61 | 3.62 | 3.63 | 3.64 | 1.0%  |

**Table 4. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
04 - West North Central**

1998 -

|                                   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Total Energy Consumption          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Distillate Fuel                   | 0.74   | 0.76   | 0.77   | 0.78   | 0.79   | 0.80   | 0.81   | 0.82   | 0.82   | 0.83   | 0.83   | 0.84   | 0.84   | 0.84   | 0.85   | 0.86   | 0.86   | 0.87   | 0.87   | 0.87   | 0.88   | 0.88   | 0.8%  |
| Kerosene                          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -0.3% |
| Jet Fuel 8/                       | 0.16   | 0.17   | 0.17   | 0.18   | 0.18   | 0.19   | 0.20   | 0.20   | 0.21   | 0.21   | 0.22   | 0.22   | 0.23   | 0.23   | 0.24   | 0.24   | 0.25   | 0.25   | 0.26   | 0.26   | 0.27   | 0.27   | 2.4%  |
| Liquefied Petroleum Gas           | 0.17   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.3%  |
| Motor Gasoline 2/                 | 1.26   | 1.31   | 1.33   | 1.35   | 1.37   | 1.40   | 1.42   | 1.44   | 1.46   | 1.48   | 1.49   | 1.51   | 1.53   | 1.54   | 1.56   | 1.57   | 1.59   | 1.60   | 1.61   | 1.62   | 1.63   | 1.64   | 1.2%  |
| Petrochemical Feedstocks          | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.9%  |
| Residual Fuel                     | 0.02   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | -1.8% |
| Other Petroleum 12/               | 0.28   | 0.30   | 0.31   | 0.31   | 0.31   | 0.31   | 0.32   | 0.32   | 0.33   | 0.33   | 0.33   | 0.33   | 0.33   | 0.33   | 0.34   | 0.34   | 0.35   | 0.35   | 0.35   | 0.35   | 0.36   | 0.36   | 1.1%  |
| Petroleum Subtotal                | 2.65   | 2.75   | 2.79   | 2.83   | 2.87   | 2.91   | 2.95   | 2.99   | 3.03   | 3.06   | 3.09   | 3.12   | 3.14   | 3.17   | 3.20   | 3.23   | 3.27   | 3.29   | 3.31   | 3.33   | 3.35   | 3.38   | 1.1%  |
| Natural Gas                       | 1.43   | 1.51   | 1.48   | 1.49   | 1.50   | 1.52   | 1.55   | 1.59   | 1.62   | 1.65   | 1.67   | 1.71   | 1.75   | 1.77   | 1.81   | 1.84   | 1.91   | 1.94   | 1.96   | 1.98   | 2.00   | 2.02   | 1.6%  |
| Metallurgical Coal                | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Steam Coal                        | 2.43   | 2.63   | 2.71   | 2.80   | 2.89   | 3.01   | 3.05   | 3.06   | 3.07   | 3.07   | 3.08   | 3.08   | 3.09   | 3.09   | 3.09   | 3.10   | 3.11   | 3.11   | 3.11   | 3.11   | 3.12   | 3.13   | 1.1%  |
| Net Coal Coke Imports             | 0.02   | 0.03   | 0.03   | 0.03   | 0.04   | 0.04   | 0.04   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.07   | 0.07   | 0.07   | 6.4%  |
| Coal Subtotal                     | 2.45   | 2.66   | 2.74   | 2.84   | 2.92   | 3.05   | 3.09   | 3.11   | 3.12   | 3.12   | 3.13   | 3.14   | 3.14   | 3.15   | 3.15   | 3.16   | 3.17   | 3.17   | 3.18   | 3.18   | 3.19   | 3.20   | 1.2%  |
| Nuclear Power                     | 0.45   | 0.45   | 0.45   | 0.45   | 0.44   | 0.38   | 0.37   | 0.37   | 0.37   | 0.37   | 0.37   | 0.36   | 0.32   | 0.32   | 0.32   | 0.29   | 0.28   | 0.28   | 0.28   | 0.28   | 0.28   | 0.27   | -2.2% |
| Renewable Energy 17/              | 0.34   | 0.34   | 0.36   | 0.37   | 0.37   | 0.37   | 0.38   | 0.38   | 0.38   | 0.38   | 0.39   | 0.39   | 0.39   | 0.39   | 0.39   | 0.40   | 0.40   | 0.40   | 0.40   | 0.40   | 0.41   | 0.41   | 0.9%  |
| Methanol (M85) 11/                | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 14.1% |
| Liquid Hydrogen                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Electricity Imports 16/           | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Total                             | 7.33   | 7.71   | 7.83   | 7.98   | 8.11   | 8.25   | 8.35   | 8.44   | 8.51   | 8.59   | 8.65   | 8.72   | 8.75   | 8.81   | 8.88   | 8.93   | 9.04   | 9.09   | 9.13   | 9.18   | 9.23   | 9.29   | 1.1%  |
| Energy Use & Related Statistics   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Delivered Energy Use              | 5.21   | 5.45   | 5.51   | 5.58   | 5.65   | 5.74   | 5.82   | 5.89   | 5.96   | 6.03   | 6.08   | 6.15   | 6.20   | 6.26   | 6.31   | 6.38   | 6.45   | 6.49   | 6.53   | 6.58   | 6.64   | 6.70   | 1.1%  |
| Total Energy Use                  | 7.33   | 7.71   | 7.83   | 7.98   | 8.11   | 8.25   | 8.35   | 8.44   | 8.51   | 8.59   | 8.65   | 8.72   | 8.75   | 8.81   | 8.88   | 8.93   | 9.04   | 9.09   | 9.13   | 9.18   | 9.23   | 9.29   | 1.1%  |
| Population (millions)             | 18.71  | 18.94  | 19.05  | 19.17  | 19.29  | 19.40  | 19.50  | 19.60  | 19.70  | 19.81  | 19.92  | 20.04  | 20.15  | 20.27  | 20.39  | 20.50  | 20.61  | 20.71  | 20.82  | 20.92  | 21.01  | 21.10  | 0.5%  |
| US GDP (billion 1992 dollars)     | 7552   | 7991   | 8191   | 8377   | 8596   | 8824   | 9056   | 9251   | 9449   | 9651   | 9840   | 10054  | 10218  | 10416  | 10648  | 10906  | 11147  | 11331  | 11533  | 11741  | 11959  | 12179  | 2.2%  |
| Total Carbon Emis.(mill. m. tons) | 1485.4 | 1552.4 | 1575.6 | 1599.5 | 1628.5 | 1657.5 | 1683.4 | 1707.8 | 1730.6 | 1750.9 | 1767.1 | 1786.6 | 1802.6 | 1821.3 | 1842.3 | 1865.8 | 1893.4 | 1908.8 | 1927.8 | 1944.7 | 1961.6 | 1979.2 | 1.3%  |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10

percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 5. Energy Consumption by Sector and Source (1 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**05 - South Atlantic**

1998 -

1998 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2020

|                            | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020  | 2020  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| Energy Consumption         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |
| Residential                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |
| Distillate Fuel            | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06  | -1.6% |
| Kerosene                   | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04  | 0.1%  |
| Liquefied Petroleum Gas    | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08  | -0.1% |
| Petroleum Subtotal         | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.18 | 0.18 | 0.18  | -0.7% |
| Natural Gas                | 0.38 | 0.41 | 0.42 | 0.43 | 0.44 | 0.46 | 0.47 | 0.48 | 0.49 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.61 | 0.62 | 0.63  | 2.4%  |
| Coal                       | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | -0.4% |
| Renewable Energy 1/        | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08  | 1.2%  |
| Electricity                | 0.90 | 0.95 | 0.97 | 0.99 | 1.01 | 1.03 | 1.05 | 1.07 | 1.09 | 1.11 | 1.13 | 1.15 | 1.17 | 1.19 | 1.20 | 1.22 | 1.23 | 1.25 | 1.27 | 1.28 | 1.30 | 1.32  | 1.7%  |
| Delivered Energy           | 1.56 | 1.65 | 1.68 | 1.71 | 1.74 | 1.77 | 1.80 | 1.83 | 1.86 | 1.90 | 1.93 | 1.96 | 1.98 | 2.01 | 2.03 | 2.06 | 2.09 | 2.12 | 2.14 | 2.16 | 2.19 | 2.22  | 1.6%  |
| Electricity Related Losses | 1.90 | 1.94 | 1.95 | 1.94 | 1.98 | 2.01 | 2.01 | 2.00 | 2.01 | 2.01 | 2.01 | 1.98 | 1.95 | 1.95 | 1.94 | 1.94 | 1.94 | 1.93 | 1.93 | 1.95 | 1.95 | 1.99  | 0.2%  |
| Total                      | 3.46 | 3.59 | 3.63 | 3.65 | 3.72 | 3.78 | 3.81 | 3.83 | 3.87 | 3.90 | 3.93 | 3.93 | 3.93 | 3.96 | 3.97 | 4.00 | 4.02 | 4.05 | 4.06 | 4.11 | 4.14 | 4.21  | 0.9%  |
| Commercial                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |
| Distillate Fuel            | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08  | 0.3%  |
| Residual Fuel              | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.9%  |
| Kerosene                   | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | 0.5%  |
| Liquefied Petroleum Gas    | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02  | 1.2%  |
| Motor Gasoline 2/          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | -0.3% |
| Petroleum Subtotal         | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11  | 0.5%  |
| Natural Gas                | 0.32 | 0.34 | 0.34 | 0.35 | 0.36 | 0.36 | 0.37 | 0.37 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.41 | 0.42 | 0.42 | 0.43 | 0.43 | 0.44 | 0.44 | 0.44 | 0.45  | 1.5%  |
| Coal                       | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02  | 1.3%  |
| Renewable Energy 3/        | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01  | N/A   |
| Electricity                | 0.80 | 0.84 | 0.86 | 0.87 | 0.89 | 0.91 | 0.92 | 0.94 | 0.95 | 0.97 | 0.99 | 1.00 | 1.02 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 | 1.09 | 1.09 | 1.10 | 1.10  | 1.5%  |
| Delivered Energy           | 1.25 | 1.31 | 1.34 | 1.36 | 1.38 | 1.41 | 1.43 | 1.45 | 1.47 | 1.50 | 1.52 | 1.55 | 1.57 | 1.60 | 1.62 | 1.63 | 1.65 | 1.66 | 1.67 | 1.68 | 1.69 | 1.70  | 1.4%  |
| Electricity Related Losses | 1.68 | 1.71 | 1.72 | 1.72 | 1.75 | 1.76 | 1.76 | 1.76 | 1.76 | 1.75 | 1.75 | 1.72 | 1.71 | 1.70 | 1.70 | 1.69 | 1.68 | 1.66 | 1.65 | 1.66 | 1.65 | 1.66  | 0.0%  |
| Total                      | 2.92 | 3.02 | 3.06 | 3.08 | 3.13 | 3.16 | 3.19 | 3.21 | 3.23 | 3.25 | 3.28 | 3.27 | 3.28 | 3.30 | 3.31 | 3.33 | 3.32 | 3.32 | 3.33 | 3.34 | 3.34 | 3.35  | 0.6%  |
| Industrial 4/              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |
| Distillate Fuel            | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.21  | 1.3%  |
| Liquefied Petroleum Gas    | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08  | 1.1%  |
| Petrochemical Feedstocks   | 0.17 | 0.16 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22  | 1.1%  |
| Residual Fuel              | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11  | 1.1%  |
| Motor Gasoline 2/          | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04  | 1.4%  |
| Other Petroleum 5/         | 0.34 | 0.36 | 0.36 | 0.37 | 0.37 | 0.37 | 0.37 | 0.38 | 0.38 | 0.39 | 0.39 | 0.40 | 0.40 | 0.40 | 0.41 | 0.42 | 0.43 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46  | 1.4%  |
| Petroleum Subtotal         | 0.84 | 0.87 | 0.88 | 0.89 | 0.90 | 0.91 | 0.93 | 0.94 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | 1.00 | 1.02 | 1.03 | 1.05 | 1.06 | 1.07 | 1.08 | 1.09 | 1.11  | 1.3%  |
| Natural Gas 6/             | 0.70 | 0.70 | 0.70 | 0.71 | 0.73 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.79 | 0.80 | 0.80 | 0.81 | 0.82 | 0.83 | 0.84 | 0.85 | 0.86 | 0.86 | 0.87 | 0.88  | 1.0%  |
| Metallurgical Coal         | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | -1.8% |       |
| Steam Coal                 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.31 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.33  | 0.2%  |
| Net Coal Coke Imports      | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03  | 7.0%  |
| Coal Subtotal              | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.40 | 0.40 | 0.40  | 0.3%  |
| Renewable Energy 7/        | 0.40 | 0.41 | 0.41 | 0.42 | 0.42 | 0.43 | 0.44 | 0.44 | 0.44 | 0.45 | 0.45 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.48 | 0.49 | 0.9%  |       |
| Electricity                | 0.54 | 0.54 | 0.54 | 0.55 | 0.57 | 0.58 | 0.59 | 0.60 | 0.61 | 0.62 | 0.62 | 0.63 | 0.64 | 0.65 | 0.66 | 0.67 | 0.68 | 0.69 | 0.70 | 0.71 | 0.72 | 0.73  | 1.4%  |
| Delivered Energy           | 2.86 | 2.89 | 2.91 | 2.95 | 3.00 | 3.05 | 3.10 | 3.14 | 3.17 | 3.20 | 3.22 | 3.25 | 3.27 | 3.30 | 3.34 | 3.39 | 3.43 | 3.46 | 3.49 | 3.53 | 3.56 | 3.60  | 1.1%  |
| Electricity Related Losses | 1.13 | 1.10 | 1.09 | 1.08 | 1.11 | 1.12 | 1.13 | 1.12 | 1.12 | 1.11 | 1.10 | 1.08 | 1.07 | 1.06 | 1.06 | 1.07 | 1.07 | 1.06 | 1.06 | 1.08 | 1.08 | 1.09  | -0.1% |
| Total                      | 3.99 | 3.99 | 4.00 | 4.03 | 4.11 | 4.17 | 4.23 | 4.26 | 4.29 | 4.31 | 4.32 | 4.33 | 4.34 | 4.37 | 4.41 | 4.46 | 4.50 | 4.52 | 4.56 | 4.60 | 4.64 | 4.70  | 0.7%  |

**Table 5. Energy Consumption by Sector and Source (2 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**05 - South Atlantic**

1998-

|  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Transportation                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 0.86  | 0.89  | 0.91  | 0.92  | 0.94  | 0.96  | 0.98  | 0.99  | 1.00  | 1.01  | 1.02  | 1.04  | 1.05  | 1.06  | 1.07  | 1.09  | 1.11  | 1.12  | 1.13  | 1.14  | 1.16  | 1.17  | 1.4%  |
| Jet Fuel 8/                              | 0.41  | 0.43  | 0.45  | 0.46  | 0.47  | 0.49  | 0.51  | 0.53  | 0.54  | 0.56  | 0.57  | 0.59  | 0.61  | 0.62  | 0.64  | 0.66  | 0.68  | 0.70  | 0.72  | 0.74  | 0.76  | 0.78  | 3.0%  |
| Motor Gasoline 2/                        | 3.03  | 3.15  | 3.22  | 3.30  | 3.35  | 3.43  | 3.50  | 3.58  | 3.65  | 3.72  | 3.79  | 3.87  | 3.93  | 4.00  | 4.06  | 4.14  | 4.21  | 4.27  | 4.33  | 4.40  | 4.46  | 4.53  | 1.8%  |
| Residual Fuel                            | 0.07  | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.11  | 0.11  | 0.11  | 0.12  | 0.12  | 0.12  | 0.12  | 0.13  | 2.9%  |
| Liquefied Petroleum Gas                  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 6.0%  |
| Other Petroleum 9/                       | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 1.3%  |
| Petroleum Subtotal                       | 4.42  | 4.61  | 4.72  | 4.82  | 4.92  | 5.03  | 5.14  | 5.25  | 5.36  | 5.47  | 5.57  | 5.68  | 5.77  | 5.87  | 5.97  | 6.09  | 6.20  | 6.30  | 6.39  | 6.49  | 6.59  | 6.70  | 1.9%  |
| Pipeline Fuel Natural Gas                | 0.07  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.8%  |
| Compressed Natural Gas                   | 0.00  | 0.01  | 0.01  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 13.4% |
| Renewables (E85) 10/                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 16.8% |
| Methanol (M85) 11/                       | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 14.8% |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Electricity                              | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 4.7%  |
| Delivered Energy                         | 4.51  | 4.70  | 4.81  | 4.92  | 5.03  | 5.15  | 5.27  | 5.39  | 5.51  | 5.62  | 5.73  | 5.84  | 5.94  | 6.05  | 6.16  | 6.28  | 6.40  | 6.50  | 6.61  | 6.71  | 6.81  | 6.92  | 2.0%  |
| Electricity Related Losses               | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 3.1%  |
| Total                                    | 4.54  | 4.73  | 4.84  | 4.95  | 5.06  | 5.18  | 5.30  | 5.42  | 5.54  | 5.66  | 5.77  | 5.88  | 5.98  | 6.09  | 6.20  | 6.33  | 6.45  | 6.55  | 6.65  | 6.76  | 6.86  | 6.97  | 2.0%  |
| Delivered Energy Consumption All Sectors |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 1.18  | 1.21  | 1.23  | 1.25  | 1.27  | 1.29  | 1.31  | 1.33  | 1.34  | 1.36  | 1.36  | 1.38  | 1.39  | 1.40  | 1.42  | 1.44  | 1.45  | 1.47  | 1.48  | 1.49  | 1.51  | 1.52  | 1.1%  |
| Kerosene                                 | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.1%  |
| Jet Fuel 8/                              | 0.41  | 0.43  | 0.45  | 0.46  | 0.47  | 0.49  | 0.51  | 0.53  | 0.54  | 0.56  | 0.57  | 0.59  | 0.61  | 0.62  | 0.64  | 0.66  | 0.68  | 0.70  | 0.72  | 0.74  | 0.76  | 0.78  | 3.0%  |
| Liquefied Petroleum Gas                  | 0.16  | 0.17  | 0.17  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 1.0%  |
| Motor Gasoline 2/                        | 3.06  | 3.18  | 3.26  | 3.33  | 3.38  | 3.46  | 3.53  | 3.61  | 3.69  | 3.76  | 3.83  | 3.90  | 3.97  | 4.03  | 4.10  | 4.17  | 4.25  | 4.31  | 4.37  | 4.44  | 4.50  | 4.57  | 1.8%  |
| Petrochemical Feedstocks                 | 0.17  | 0.16  | 0.17  | 0.17  | 0.17  | 0.18  | 0.18  | 0.19  | 0.19  | 0.19  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.22  | 0.22  | 1.1%  |
| Residual Fuel                            | 0.16  | 0.17  | 0.17  | 0.18  | 0.18  | 0.18  | 0.19  | 0.19  | 0.19  | 0.20  | 0.20  | 0.21  | 0.21  | 0.21  | 0.22  | 0.22  | 0.22  | 0.23  | 0.23  | 0.24  | 0.24  | 0.25  | 1.9%  |
| Other Petroleum 12/                      | 0.38  | 0.41  | 0.41  | 0.42  | 0.42  | 0.42  | 0.43  | 0.43  | 0.44  | 0.44  | 0.45  | 0.45  | 0.46  | 0.46  | 0.47  | 0.48  | 0.49  | 0.49  | 0.50  | 0.51  | 0.51  | 0.52  | 1.4%  |
| Petroleum Subtotal                       | 5.58  | 5.79  | 5.91  | 6.02  | 6.13  | 6.26  | 6.38  | 6.51  | 6.63  | 6.74  | 6.85  | 6.97  | 7.07  | 7.18  | 7.29  | 7.42  | 7.55  | 7.66  | 7.76  | 7.87  | 7.98  | 8.10  | 1.7%  |
| Natural Gas 6/                           | 1.47  | 1.52  | 1.54  | 1.57  | 1.61  | 1.65  | 1.69  | 1.72  | 1.75  | 1.78  | 1.81  | 1.84  | 1.86  | 1.89  | 1.92  | 1.95  | 1.98  | 2.01  | 2.03  | 2.05  | 2.08  | 2.10  | 1.6%  |
| Metallurgical Coal                       | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | -1.8% |
| Steam Coal                               | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.35  | 0.35  | 0.35  | 0.35  | 0.3%  |
| Net Coal Coke Imports                    | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 7.0%  |
| Coal Subtotal                            | 0.40  | 0.40  | 0.40  | 0.40  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | 0.3%  |
| Renewable Energy 13/                     | 0.48  | 0.49  | 0.50  | 0.51  | 0.51  | 0.52  | 0.53  | 0.53  | 0.54  | 0.54  | 0.55  | 0.55  | 0.56  | 0.56  | 0.57  | 0.57  | 0.58  | 0.58  | 0.58  | 0.59  | 0.59  | 0.60  | 1.0%  |
| Methanol (M85) 11/                       | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 14.8% |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Electricity                              | 2.25  | 2.34  | 2.38  | 2.43  | 2.48  | 2.53  | 2.58  | 2.62  | 2.67  | 2.72  | 2.76  | 2.80  | 2.85  | 2.90  | 2.94  | 2.98  | 3.02  | 3.05  | 3.08  | 3.12  | 3.15  | 3.19  | 1.6%  |
| Delivered Energy                         | 10.17 | 10.55 | 10.74 | 10.94 | 11.15 | 11.38 | 11.60 | 11.81 | 12.01 | 12.22 | 12.40 | 12.60 | 12.77 | 12.96 | 13.15 | 13.37 | 13.57 | 13.74 | 13.91 | 14.08 | 14.26 | 14.44 | 1.6%  |
| Electricity Related Losses               | 4.73  | 4.77  | 4.78  | 4.77  | 4.87  | 4.92  | 4.93  | 4.92  | 4.93  | 4.90  | 4.90  | 4.82  | 4.77  | 4.76  | 4.74  | 4.75  | 4.73  | 4.70  | 4.69  | 4.73  | 4.73  | 4.79  | 0.1%  |
| Total                                    | 14.90 | 15.33 | 15.52 | 15.71 | 16.02 | 16.30 | 16.53 | 16.73 | 16.94 | 17.12 | 17.30 | 17.42 | 17.54 | 17.72 | 17.90 | 18.12 | 18.30 | 18.44 | 18.60 | 18.81 | 18.99 | 19.23 | 1.2%  |
| Electric Generators 14/                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 0.02  | 0.02  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | -3.7% |
| Residual Fuel                            | 0.50  | 0.33  | 0.32  | 0.27  | 0.22  | 0.19  | 0.19  | 0.21  | 0.20  | 0.18  | 0.17  | 0.16  | 0.14  | 0.14  | 0.13  | 0.14  | 0.15  | 0.14  | 0.13  | 0.13  | 0.13  | 0.13  | -6.1% |
| Petroleum Subtotal                       | 0.53  | 0.34  | 0.33  | 0.28  | 0.24  | 0.20  | 0.20  | 0.21  | 0.21  | 0.19  | 0.18  | 0.16  | 0.15  | 0.14  | 0.14  | 0.15  | 0.16  | 0.15  | 0.14  | 0.14  | 0.14  | 0.14  | -6.0% |
| Natural Gas                              | 0.41  | 0.47  | 0.39  | 0.39  | 0.41  | 0.43  | 0.49  | 0.54  | 0.59  | 0.61  | 0.61  | 0.66  | 0.70  | 0.74  | 0.80  | 0.85  | 0.88  | 0.91  | 0.95  | 0.97  | 0.99  | 1.00  | 4.2%  |
| Steam Coal                               | 3.91  | 4.16  | 4.26  | 4.34  | 4.52  | 4.62  | 4.68  | 4.74  | 4.79  | 4.82  | 4.86  | 4.81  | 4.82  | 4.85  | 4.88  | 4.94  | 5.02  | 5.05  | 5.13  | 5.21  | 5.27  | 5.36  | 1.4%  |
| Nuclear Power                            | 1.89  | 1.90  | 1.90  | 1.90  | 1.90  | 1.90  | 1.84  | 1.75  | 1.71  | 1.71  | 1.71  | 1.69  | 1.65  | 1.62  | 1.56  | 1.49  | 1.39  | 1.33  | 1.25  | 1.23  | 1.18  | 1.18  | -2.1% |
| Renewable Energy 15/                     | 0.24  | 0.24  | 0.27  | 0.27  | 0.27  | 0.29  | 0.30  | 0.30  | 0.31  | 0.29  | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | 0.29  | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | 1.0%  |
| Electricity Imports 16/                  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Total                                    | 6.98  | 7.12  | 7.16  | 7.20  | 7.35  | 7.45  | 7.50  | 7.54  | 7.59  | 7.62  | 7.66  | 7.63  | 7.62  | 7.65  | 7.68  | 7.73  | 7.74  | 7.75  | 7.78  | 7.85  | 7.89  | 7.98  | 0.6%  |

**Table 5. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
05 - South Atlantic**

1998 -

|                                   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Total Energy Consumption          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Distillate Fuel                   | 1.20   | 1.23   | 1.24   | 1.26   | 1.28   | 1.30   | 1.32   | 1.33   | 1.35   | 1.36   | 1.37   | 1.38   | 1.39   | 1.41   | 1.42   | 1.44   | 1.46   | 1.47   | 1.49   | 1.50   | 1.52   | 1.53   | 1.1%  |
| Kerosene                          | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.1%  |
| Jet Fuel 8/                       | 0.41   | 0.43   | 0.45   | 0.46   | 0.47   | 0.49   | 0.51   | 0.53   | 0.54   | 0.56   | 0.57   | 0.59   | 0.61   | 0.62   | 0.64   | 0.66   | 0.68   | 0.70   | 0.72   | 0.74   | 0.76   | 0.78   | 3.0%  |
| Liquefied Petroleum Gas           | 0.16   | 0.17   | 0.17   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.19   | 0.19   | 0.19   | 0.19   | 0.19   | 0.19   | 0.19   | 0.19   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 1.0%  |
| Motor Gasoline 2/                 | 3.06   | 3.18   | 3.26   | 3.33   | 3.38   | 3.46   | 3.53   | 3.61   | 3.69   | 3.76   | 3.83   | 3.90   | 3.97   | 4.03   | 4.10   | 4.17   | 4.25   | 4.31   | 4.37   | 4.44   | 4.50   | 4.57   | 1.8%  |
| Petrochemical Feedstocks          | 0.17   | 0.16   | 0.17   | 0.17   | 0.17   | 0.18   | 0.18   | 0.19   | 0.19   | 0.19   | 0.19   | 0.20   | 0.20   | 0.20   | 0.20   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.22   | 0.22   | 1.1%  |
| Residual Fuel                     | 0.67   | 0.50   | 0.49   | 0.45   | 0.40   | 0.38   | 0.38   | 0.40   | 0.39   | 0.38   | 0.37   | 0.36   | 0.35   | 0.35   | 0.35   | 0.36   | 0.38   | 0.37   | 0.37   | 0.37   | 0.37   | 0.37   | -2.6% |
| Other Petroleum 12/               | 0.38   | 0.41   | 0.41   | 0.42   | 0.42   | 0.42   | 0.43   | 0.43   | 0.44   | 0.44   | 0.45   | 0.45   | 0.46   | 0.46   | 0.47   | 0.48   | 0.49   | 0.49   | 0.50   | 0.51   | 0.51   | 0.52   | 1.4%  |
| Petroleum Subtotal                | 6.11   | 6.13   | 6.24   | 6.30   | 6.36   | 6.46   | 6.58   | 6.72   | 6.83   | 6.93   | 7.03   | 7.13   | 7.22   | 7.32   | 7.43   | 7.57   | 7.71   | 7.81   | 7.90   | 8.01   | 8.12   | 8.24   | 1.4%  |
| Natural Gas                       | 1.88   | 1.99   | 1.93   | 1.96   | 2.02   | 2.08   | 2.18   | 2.26   | 2.34   | 2.39   | 2.42   | 2.50   | 2.56   | 2.64   | 2.72   | 2.80   | 2.86   | 2.92   | 2.98   | 3.02   | 3.07   | 3.10   | 2.3%  |
| Metallurgical Coal                | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | -1.8% |
| Steam Coal                        | 4.24   | 4.49   | 4.59   | 4.68   | 4.86   | 4.96   | 5.01   | 5.08   | 5.12   | 5.16   | 5.20   | 5.15   | 5.16   | 5.19   | 5.22   | 5.28   | 5.36   | 5.39   | 5.47   | 5.56   | 5.62   | 5.71   | 1.4%  |
| Net Coal Coke Imports             | 0.01   | 0.01   | 0.01   | 0.01   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 7.0%  |
| Coal Subtotal                     | 4.31   | 4.56   | 4.67   | 4.75   | 4.93   | 5.03   | 5.09   | 5.15   | 5.20   | 5.24   | 5.28   | 5.22   | 5.23   | 5.26   | 5.30   | 5.35   | 5.43   | 5.47   | 5.55   | 5.63   | 5.69   | 5.78   | 1.3%  |
| Nuclear Power                     | 1.89   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.84   | 1.75   | 1.71   | 1.71   | 1.71   | 1.69   | 1.65   | 1.62   | 1.56   | 1.49   | 1.39   | 1.33   | 1.25   | 1.23   | 1.18   | 1.18   | -2.1% |
| Renewable Energy 17/              | 0.72   | 0.74   | 0.77   | 0.78   | 0.79   | 0.81   | 0.83   | 0.83   | 0.84   | 0.84   | 0.85   | 0.86   | 0.86   | 0.86   | 0.87   | 0.87   | 0.87   | 0.88   | 0.89   | 0.89   | 0.89   | 0.90   | 1.0%  |
| Methanol (M85) 11/                | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 14.8% |
| Liquid Hydrogen                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Electricity Imports 16/           | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Total                             | 14.90  | 15.33  | 15.52  | 15.71  | 16.02  | 16.30  | 16.53  | 16.73  | 16.94  | 17.12  | 17.30  | 17.42  | 17.54  | 17.72  | 17.90  | 18.12  | 18.30  | 18.44  | 18.60  | 18.81  | 18.99  | 19.23  | 1.2%  |
| Energy Use & Related Statistics   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Delivered Energy Use              | 10.17  | 10.55  | 10.74  | 10.94  | 11.15  | 11.38  | 11.60  | 11.81  | 12.01  | 12.22  | 12.40  | 12.60  | 12.77  | 12.96  | 13.15  | 13.37  | 13.57  | 13.74  | 13.91  | 14.08  | 14.26  | 14.44  | 1.6%  |
| Total Energy Use                  | 14.90  | 15.33  | 15.52  | 15.71  | 16.02  | 16.30  | 16.53  | 16.73  | 16.94  | 17.12  | 17.30  | 17.42  | 17.54  | 17.72  | 17.90  | 18.12  | 18.30  | 18.44  | 18.60  | 18.81  | 18.99  | 19.23  | 1.2%  |
| Population (millions)             | 49.01  | 50.18  | 50.76  | 51.36  | 51.95  | 52.55  | 53.16  | 53.78  | 54.42  | 55.07  | 55.74  | 56.42  | 57.12  | 57.83  | 58.54  | 59.26  | 59.99  | 60.72  | 61.46  | 62.21  | 62.95  | 63.68  | 1.2%  |
| US GDP (billion 1992 dollars)     | 7552   | 7991   | 8191   | 8377   | 8596   | 8824   | 9056   | 9251   | 9449   | 9651   | 9840   | 10054  | 10218  | 10416  | 10648  | 10906  | 11147  | 11331  | 11533  | 11741  | 11959  | 12179  | 2.2%  |
| Total Carbon Emis.(mill. m. tons) | 1485.4 | 1552.4 | 1575.6 | 1599.5 | 1628.5 | 1657.5 | 1683.4 | 1707.8 | 1730.6 | 1750.9 | 1767.1 | 1786.6 | 1802.6 | 1821.3 | 1842.3 | 1865.8 | 1893.4 | 1908.8 | 1927.8 | 1944.7 | 1961.6 | 1979.2 | 1.3%  |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10

percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 6. Energy Consumption by Sector and Source (1 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**06 - East South Central**

1998 -

|                            | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <b>Energy Consumption</b>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| <b>Residential</b>         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.9% |
| Kerosene                   | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -1.3% |
| Liquefied Petroleum Gas    | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.5%  |
| Petroleum Subtotal         | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.1%  |
| Natural Gas                | 0.19 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 1.6%  |
| Coal                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.5% |
| Renewable Energy 1/        | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 1.2%  |
| Electricity                | 0.33 | 0.35 | 0.35 | 0.36 | 0.36 | 0.37 | 0.37 | 0.37 | 0.38 | 0.38 | 0.38 | 0.39 | 0.39 | 0.40 | 0.40 | 0.40 | 0.41 | 0.41 | 0.41 | 0.42 | 0.42 | 0.42 | 1.1%  |
| Delivered Energy           | 0.59 | 0.64 | 0.65 | 0.65 | 0.66 | 0.67 | 0.67 | 0.68 | 0.69 | 0.70 | 0.70 | 0.71 | 0.72 | 0.72 | 0.73 | 0.74 | 0.74 | 0.75 | 0.75 | 0.76 | 0.77 | 0.77 | 1.2%  |
| Electricity Related Losses | 0.83 | 0.90 | 0.93 | 0.93 | 0.95 | 0.97 | 0.98 | 0.99 | 1.01 | 1.03 | 1.04 | 1.05 | 1.07 | 1.07 | 1.07 | 1.06 | 1.06 | 1.06 | 1.03 | 1.01 | 1.01 | 1.01 | 0.9%  |
| Total                      | 1.42 | 1.53 | 1.57 | 1.59 | 1.61 | 1.63 | 1.65 | 1.68 | 1.70 | 1.73 | 1.74 | 1.76 | 1.78 | 1.80 | 1.80 | 1.80 | 1.80 | 1.81 | 1.78 | 1.77 | 1.78 | 1.78 | 1.0%  |
| <b>Commercial</b>          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.2% |
| Residual Fuel              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.6%  |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.2%  |
| Liquefied Petroleum Gas    | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 1.0%  |
| Motor Gasoline 2/          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Petroleum Subtotal         | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.2%  |
| Natural Gas                | 0.15 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 1.0%  |
| Coal                       | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 1.0%  |
| Renewable Energy 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0%  |
| Electricity                | 0.16 | 0.16 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 1.8%  |
| Delivered Energy           | 0.33 | 0.36 | 0.36 | 0.37 | 0.38 | 0.38 | 0.39 | 0.39 | 0.40 | 0.41 | 0.41 | 0.42 | 0.42 | 0.43 | 0.44 | 0.44 | 0.44 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 1.4%  |
| Electricity Related Losses | 0.39 | 0.42 | 0.44 | 0.45 | 0.46 | 0.48 | 0.49 | 0.51 | 0.52 | 0.54 | 0.55 | 0.56 | 0.58 | 0.58 | 0.59 | 0.59 | 0.59 | 0.58 | 0.57 | 0.56 | 0.56 | 0.55 | 1.6%  |
| Total                      | 0.72 | 0.77 | 0.80 | 0.82 | 0.84 | 0.86 | 0.88 | 0.90 | 0.92 | 0.94 | 0.96 | 0.98 | 1.00 | 1.02 | 1.03 | 1.03 | 1.03 | 1.03 | 1.02 | 1.01 | 1.01 | 1.00 | 1.5%  |
| <b>Industrial 4/</b>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 1.3%  |
| Liquefied Petroleum Gas    | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 1.1%  |
| Petrochemical Feedstocks   | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 1.1%  |
| Residual Fuel              | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 1.1%  |
| Motor Gasoline 2/          | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 1.4%  |
| Other Petroleum 5/         | 0.30 | 0.31 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.33 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.37 | 1.0%  |
| Petroleum Subtotal         | 0.58 | 0.59 | 0.60 | 0.60 | 0.61 | 0.62 | 0.63 | 0.63 | 0.64 | 0.65 | 0.65 | 0.66 | 0.67 | 0.67 | 0.68 | 0.69 | 0.70 | 0.71 | 0.71 | 0.72 | 0.73 | 0.73 | 1.1%  |
| Natural Gas 6/             | 0.51 | 0.50 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.56 | 0.56 | 0.57 | 0.57 | 0.58 | 0.59 | 0.59 | 0.60 | 0.61 | 0.62 | 0.62 | 0.63 | 0.64 | 0.64 | 1.1%  |
| Metallurgical Coal         | 0.11 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | -1.8% |
| Steam Coal                 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.2%  |
| Net Coal Coke Imports      | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 7.0%  |
| Coal Subtotal              | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.32 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.0%  |
| Renewable Energy 7/        | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 1.1%  |
| Electricity                | 0.47 | 0.47 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.53 | 0.54 | 0.54 | 0.55 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.61 | 0.62 | 0.62 | 0.63 | 1.4%  |
| Delivered Energy           | 2.10 | 2.12 | 2.13 | 2.15 | 2.19 | 2.23 | 2.26 | 2.29 | 2.31 | 2.33 | 2.35 | 2.37 | 2.39 | 2.41 | 2.44 | 2.47 | 2.51 | 2.53 | 2.55 | 2.57 | 2.60 | 2.63 | 1.0%  |
| Electricity Related Losses | 1.16 | 1.21 | 1.24 | 1.26 | 1.30 | 1.33 | 1.36 | 1.39 | 1.42 | 1.45 | 1.46 | 1.49 | 1.51 | 1.52 | 1.54 | 1.54 | 1.54 | 1.54 | 1.52 | 1.50 | 1.51 | 1.50 | 1.2%  |
| Total                      | 3.26 | 3.33 | 3.37 | 3.41 | 3.49 | 3.55 | 3.62 | 3.68 | 3.73 | 3.78 | 3.81 | 3.86 | 3.90 | 3.94 | 3.98 | 4.01 | 4.05 | 4.07 | 4.07 | 4.07 | 4.11 | 4.13 | 1.1%  |

**Table 6. Energy Consumption by Sector and Source (2 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
06 - East South Central**

|  | 1998- |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
|--|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
|  | 1998  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
| Transportation                           |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                          | 0.45  | 0.46 | 0.47 | 0.48 | 0.48 | 0.49 | 0.50 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 0.51 | 0.52 | 0.52 | 0.52 | 0.53 | 0.53 | 0.53 | 0.54 | 0.54 | 0.54 | 0.9%  |
| Jet Fuel 8/                              | 0.15  | 0.16 | 0.16 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 2.7%  |
| Motor Gasoline 2/                        | 1.06  | 1.11 | 1.13 | 1.15 | 1.17 | 1.19 | 1.21 | 1.23 | 1.25 | 1.27 | 1.28 | 1.30 | 1.32 | 1.33 | 1.34 | 1.36 | 1.37 | 1.38 | 1.39 | 1.40 | 1.41 | 1.43 | 1.3%  |
| Residual Fuel                            | 0.02  | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 2.5%  |
| Liquefied Petroleum Gas                  | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 4.7%  |
| Other Petroleum 9/                       | 0.02  | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.9%  |
| Petroleum Subtotal                       | 1.71  | 1.77 | 1.81 | 1.85 | 1.88 | 1.91 | 1.94 | 1.98 | 2.00 | 2.03 | 2.06 | 2.08 | 2.10 | 2.12 | 2.15 | 2.18 | 2.20 | 2.22 | 2.24 | 2.26 | 2.28 | 2.30 | 1.4%  |
| Pipeline Fuel Natural Gas                | 0.11  | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 1.4%  |
| Compressed Natural Gas                   | 0.00  | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 13.1% |
| Renewables (E85) 10/                     | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.3% |
| Methanol (M85) 11/                       | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 14.2% |
| Liquid Hydrogen                          | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Electricity                              | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 4.0%  |
| Delivered Energy                         | 1.82  | 1.89 | 1.92 | 1.96 | 1.99 | 2.03 | 2.07 | 2.11 | 2.14 | 2.18 | 2.21 | 2.24 | 2.27 | 2.29 | 2.32 | 2.36 | 2.39 | 2.41 | 2.43 | 2.45 | 2.48 | 2.50 | 1.4%  |
| Electricity Related Losses               | 0.01  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 3.8%  |
| Total                                    | 1.83  | 1.90 | 1.93 | 1.97 | 2.00 | 2.05 | 2.09 | 2.13 | 2.16 | 2.20 | 2.23 | 2.26 | 2.29 | 2.32 | 2.35 | 2.38 | 2.41 | 2.43 | 2.46 | 2.48 | 2.50 | 2.52 | 1.5%  |
| Delivered Energy Consumption All Sectors |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                          | 0.57  | 0.58 | 0.59 | 0.60 | 0.61 | 0.62 | 0.63 | 0.63 | 0.64 | 0.64 | 0.64 | 0.65 | 0.65 | 0.65 | 0.66 | 0.67 | 0.67 | 0.67 | 0.68 | 0.68 | 0.69 | 0.69 | 0.9%  |
| Kerosene                                 | 0.01  | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.9% |
| Jet Fuel 8/                              | 0.15  | 0.16 | 0.16 | 0.17 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 2.7%  |
| Liquefied Petroleum Gas                  | 0.08  | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 1.1%  |
| Motor Gasoline 2/                        | 1.08  | 1.12 | 1.15 | 1.17 | 1.19 | 1.21 | 1.23 | 1.25 | 1.27 | 1.29 | 1.31 | 1.32 | 1.34 | 1.35 | 1.36 | 1.38 | 1.39 | 1.41 | 1.42 | 1.43 | 1.44 | 1.45 | 1.3%  |
| Petrochemical Feedstocks                 | 0.11  | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 1.1%  |
| Residual Fuel                            | 0.03  | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 2.2%  |
| Other Petroleum 12/                      | 0.32  | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.37 | 0.38 | 0.38 | 0.39 | 0.39 | 0.39 | 0.40 | 0.40 | 1.0%  |
| Petroleum Subtotal                       | 2.35  | 2.43 | 2.48 | 2.52 | 2.55 | 2.60 | 2.64 | 2.68 | 2.72 | 2.75 | 2.78 | 2.82 | 2.84 | 2.87 | 2.90 | 2.94 | 2.97 | 3.00 | 3.02 | 3.05 | 3.08 | 3.11 | 1.3%  |
| Natural Gas 6/                           | 0.96  | 0.98 | 0.99 | 1.00 | 1.02 | 1.04 | 1.06 | 1.08 | 1.09 | 1.11 | 1.12 | 1.14 | 1.16 | 1.17 | 1.19 | 1.20 | 1.22 | 1.23 | 1.24 | 1.25 | 1.27 | 1.28 | 1.3%  |
| Metallurgical Coal                       | 0.11  | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | -1.8% |
| Steam Coal                               | 0.22  | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.2%  |
| Net Coal Coke Imports                    | 0.01  | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 7.0%  |
| Coal Subtotal                            | 0.34  | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.34 | 0.34 | 0.0%  |
| Renewable Energy 13/                     | 0.25  | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 1.2%  |
| Methanol (M85) 11/                       | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 14.2% |
| Liquid Hydrogen                          | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Electricity                              | 0.96  | 0.99 | 1.00 | 1.01 | 1.03 | 1.05 | 1.07 | 1.09 | 1.10 | 1.12 | 1.14 | 1.15 | 1.17 | 1.18 | 1.20 | 1.22 | 1.23 | 1.25 | 1.26 | 1.27 | 1.29 | 1.30 | 1.4%  |
| Delivered Energy                         | 4.85  | 5.00 | 5.06 | 5.13 | 5.22 | 5.31 | 5.39 | 5.47 | 5.55 | 5.62 | 5.67 | 5.74 | 5.80 | 5.86 | 5.93 | 6.01 | 6.08 | 6.13 | 6.18 | 6.23 | 6.29 | 6.35 | 1.2%  |
| Electricity Related Losses               | 2.38  | 2.54 | 2.62 | 2.66 | 2.72 | 2.78 | 2.84 | 2.91 | 2.96 | 3.03 | 3.07 | 3.12 | 3.17 | 3.20 | 3.23 | 3.21 | 3.21 | 3.21 | 3.15 | 3.10 | 3.11 | 3.08 | 1.2%  |
| Total                                    | 7.24  | 7.54 | 7.68 | 7.79 | 7.94 | 8.09 | 8.23 | 8.38 | 8.51 | 8.65 | 8.74 | 8.87 | 8.97 | 9.06 | 9.16 | 9.22 | 9.29 | 9.34 | 9.33 | 9.34 | 9.40 | 9.43 | 1.2%  |
| Electric Generators 14/                  |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel                          | 0.01  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -2.8% |
| Residual Fuel                            | 0.06  | 0.06 | 0.07 | 0.06 | 0.06 | 0.05 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | -0.9% |
| Petroleum Subtotal                       | 0.07  | 0.07 | 0.07 | 0.07 | 0.06 | 0.05 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | -1.0% |
| Natural Gas                              | 0.12  | 0.06 | 0.06 | 0.06 | 0.07 | 0.14 | 0.19 | 0.26 | 0.33 | 0.41 | 0.46 | 0.54 | 0.61 | 0.65 | 0.70 | 0.77 | 0.83 | 0.86 | 0.89 | 0.94 | 0.96 | 0.96 | 10.0% |
| Steam Coal                               | 2.26  | 2.51 | 2.58 | 2.65 | 2.73 | 2.74 | 2.75 | 2.76 | 2.75 | 2.75 | 2.76 | 2.75 | 2.75 | 2.76 | 2.76 | 2.73 | 2.74 | 2.74 | 2.74 | 2.71 | 2.71 | 2.71 | 0.8%  |
| Nuclear Power                            | 0.66  | 0.66 | 0.66 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.64 | 0.58 | 0.55 | 0.47 | 0.43 | 0.43 | 0.41 | -2.1% |
| Renewable Energy 15/                     | 0.25  | 0.23 | 0.24 | 0.23 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.25 | 0.24 | 0.25 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | -0.2% |
| Electricity Imports 16/                  | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Total                                    | 3.34  | 3.53 | 3.62 | 3.67 | 3.76 | 3.84 | 3.91 | 4.00 | 4.07 | 4.15 | 4.20 | 4.28 | 4.34 | 4.38 | 4.43 | 4.43 | 4.45 | 4.45 | 4.41 | 4.37 | 4.39 | 4.38 | 1.2%  |

**Table 6. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
06 - East South Central**

1998 -

|  | 1998          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 2020        |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| <b>Total Energy Consumption</b>            |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Distillate Fuel                            | 0.57          | 0.59          | 0.59          | 0.60          | 0.61          | 0.62          | 0.63          | 0.63          | 0.64          | 0.64          | 0.64          | 0.65          | 0.65          | 0.66          | 0.66          | 0.67          | 0.67          | 0.68          | 0.68          | 0.69          | 0.69          | 0.69          | 0.9%        |
| Kerosene                                   | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | -0.9%       |
| Jet Fuel 8/                                | 0.15          | 0.16          | 0.16          | 0.17          | 0.17          | 0.18          | 0.18          | 0.19          | 0.19          | 0.20          | 0.20          | 0.21          | 0.21          | 0.22          | 0.22          | 0.23          | 0.24          | 0.24          | 0.25          | 0.25          | 0.26          | 0.26          | 2.7%        |
| Liquefied Petroleum Gas                    | 0.08          | 0.09          | 0.09          | 0.09          | 0.09          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.11          | 0.11          | 0.11          | 0.11          | 1.1%        |
| Motor Gasoline 2/                          | 1.08          | 1.12          | 1.15          | 1.17          | 1.19          | 1.21          | 1.23          | 1.25          | 1.27          | 1.29          | 1.31          | 1.32          | 1.34          | 1.35          | 1.36          | 1.38          | 1.39          | 1.41          | 1.42          | 1.43          | 1.44          | 1.45          | 1.3%        |
| Petrochemical Feedstocks                   | 0.11          | 0.11          | 0.11          | 0.11          | 0.12          | 0.12          | 0.12          | 0.12          | 0.13          | 0.13          | 0.13          | 0.13          | 0.13          | 0.13          | 0.13          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 1.1%        |
| Residual Fuel                              | 0.09          | 0.09          | 0.10          | 0.09          | 0.09          | 0.08          | 0.09          | 0.10          | 0.10          | 0.11          | 0.10          | 0.10          | 0.10          | 0.10          | 0.09          | 0.10          | 0.10          | 0.09          | 0.09          | 0.09          | 0.09          | 0.09          | 0.2%        |
| Other Petroleum 12/                        | 0.32          | 0.34          | 0.34          | 0.34          | 0.34          | 0.34          | 0.35          | 0.35          | 0.36          | 0.36          | 0.36          | 0.36          | 0.37          | 0.37          | 0.37          | 0.38          | 0.38          | 0.39          | 0.39          | 0.39          | 0.40          | 0.40          | 1.0%        |
| Petroleum Subtotal                         | 2.42          | 2.50          | 2.55          | 2.59          | 2.62          | 2.65          | 2.70          | 2.75          | 2.80          | 2.83          | 2.85          | 2.88          | 2.90          | 2.93          | 2.96          | 3.00          | 3.03          | 3.06          | 3.08          | 3.11          | 3.13          | 3.16          | 1.2%        |
| Natural Gas                                | 1.08          | 1.04          | 1.05          | 1.05          | 1.09          | 1.17          | 1.25          | 1.34          | 1.42          | 1.52          | 1.58          | 1.68          | 1.76          | 1.82          | 1.88          | 1.97          | 2.05          | 2.10          | 2.14          | 2.20          | 2.23          | 2.24          | 3.4%        |
| Metallurgical Coal                         | 0.11          | 0.11          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.10          | 0.09          | 0.09          | 0.09          | 0.09          | 0.09          | 0.09          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.07          | 0.07          | -1.8%       |
| Steam Coal                                 | 2.47          | 2.73          | 2.80          | 2.87          | 2.95          | 2.97          | 2.97          | 2.98          | 2.98          | 2.98          | 2.98          | 2.97          | 2.98          | 2.98          | 2.99          | 2.95          | 2.96          | 2.96          | 2.97          | 2.94          | 2.94          | 2.94          | 0.8%        |
| Net Coal Coke Imports                      | 0.01          | 0.01          | 0.01          | 0.01          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 7.0%        |
| Coal Subtotal                              | 2.59          | 2.84          | 2.92          | 2.98          | 3.06          | 3.08          | 3.09          | 3.09          | 3.09          | 3.09          | 3.10          | 3.09          | 3.09          | 3.09          | 3.10          | 3.06          | 3.07          | 3.07          | 3.08          | 3.04          | 3.05          | 3.05          | 0.7%        |
| Nuclear Power                              | 0.66          | 0.66          | 0.66          | 0.67          | 0.67          | 0.67          | 0.67          | 0.67          | 0.67          | 0.67          | 0.67          | 0.67          | 0.67          | 0.67          | 0.67          | 0.64          | 0.58          | 0.55          | 0.47          | 0.43          | 0.43          | 0.41          | -2.1%       |
| Renewable Energy 17/                       | 0.49          | 0.49          | 0.50          | 0.50          | 0.50          | 0.51          | 0.52          | 0.52          | 0.53          | 0.54          | 0.53          | 0.54          | 0.54          | 0.54          | 0.54          | 0.55          | 0.55          | 0.55          | 0.55          | 0.55          | 0.56          | 0.56          | 0.6%        |
| Methanol (M85) 11/                         | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 14.2%       |
| Liquid Hydrogen                            | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Electricity Imports 16/                    | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| <b>Total</b>                               | <b>7.24</b>   | <b>7.54</b>   | <b>7.68</b>   | <b>7.79</b>   | <b>7.94</b>   | <b>8.09</b>   | <b>8.23</b>   | <b>8.38</b>   | <b>8.51</b>   | <b>8.65</b>   | <b>8.74</b>   | <b>8.87</b>   | <b>8.97</b>   | <b>9.06</b>   | <b>9.16</b>   | <b>9.22</b>   | <b>9.29</b>   | <b>9.34</b>   | <b>9.33</b>   | <b>9.34</b>   | <b>9.40</b>   | <b>9.43</b>   | <b>1.2%</b> |
| <b>Energy Use &amp; Related Statistics</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Delivered Energy Use                       | 4.85          | 5.00          | 5.06          | 5.13          | 5.22          | 5.31          | 5.39          | 5.47          | 5.55          | 5.62          | 5.67          | 5.74          | 5.80          | 5.86          | 5.93          | 6.01          | 6.08          | 6.13          | 6.18          | 6.23          | 6.29          | 6.35          | 1.2%        |
| Total Energy Use                           | 7.24          | 7.54          | 7.68          | 7.79          | 7.94          | 8.09          | 8.23          | 8.38          | 8.51          | 8.65          | 8.74          | 8.87          | 8.97          | 9.06          | 9.16          | 9.22          | 9.29          | 9.34          | 9.33          | 9.34          | 9.40          | 9.43          | 1.2%        |
| Population (millions)                      | 16.48         | 16.64         | 16.73         | 16.81         | 16.90         | 16.98         | 17.07         | 17.15         | 17.23         | 17.32         | 17.41         | 17.50         | 17.60         | 17.69         | 17.78         | 17.87         | 17.96         | 18.05         | 18.14         | 18.23         | 18.32         | 18.40         | 0.5%        |
| US GDP (billion 1992 dollars)              | 7552          | 7991          | 8191          | 8377          | 8596          | 8824          | 9056          | 9251          | 9449          | 9651          | 9840          | 10054         | 10218         | 10416         | 10648         | 10906         | 11147         | 11331         | 11533         | 11741         | 11959         | 12179         | 2.2%        |
| <b>Total Carbon Emis.(mill. m. tons)</b>   | <b>1485.4</b> | <b>1552.4</b> | <b>1575.6</b> | <b>1599.5</b> | <b>1628.5</b> | <b>1657.5</b> | <b>1683.4</b> | <b>1707.8</b> | <b>1730.6</b> | <b>1750.9</b> | <b>1767.1</b> | <b>1786.6</b> | <b>1802.6</b> | <b>1821.3</b> | <b>1842.3</b> | <b>1865.8</b> | <b>1893.4</b> | <b>1908.8</b> | <b>1927.8</b> | <b>1944.7</b> | <b>1961.6</b> | <b>1979.2</b> | <b>1.3%</b> |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 7. Energy Consumption by Sector and Source (1 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**07 - West South Central**

1998 -

|                            | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Energy Consumption         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Residential                |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel            | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 1.2%  |
| Kerosene                   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.6%  |
| Liquefied Petroleum Gas    | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | -0.8% |
| Petroleum Subtotal         | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.02  | 0.02  | 0.02  | 0.02  | -0.8% |
| Natural Gas                | 0.37  | 0.44  | 0.44  | 0.44  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.46  | 0.46  | 0.47  | 0.47  | 0.47  | 0.48  | 0.48  | 0.49  | 0.49  | 0.50  | 0.50  | 1.3%  |
| Coal                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -0.6% |
| Renewable Energy 1/        | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 1.7%  |
| Electricity                | 0.54  | 0.57  | 0.58  | 0.59  | 0.60  | 0.62  | 0.63  | 0.64  | 0.65  | 0.66  | 0.67  | 0.69  | 0.70  | 0.71  | 0.72  | 0.73  | 0.74  | 0.76  | 0.77  | 0.78  | 0.79  | 0.80  | 1.8%  |
| Delivered Energy           | 0.95  | 1.06  | 1.08  | 1.09  | 1.10  | 1.12  | 1.13  | 1.14  | 1.15  | 1.16  | 1.18  | 1.19  | 1.21  | 1.23  | 1.24  | 1.25  | 1.27  | 1.29  | 1.30  | 1.31  | 1.33  | 1.35  | 1.6%  |
| Electricity Related Losses | 1.18  | 1.24  | 1.23  | 1.23  | 1.23  | 1.23  | 1.24  | 1.26  | 1.27  | 1.29  | 1.28  | 1.30  | 1.31  | 1.32  | 1.32  | 1.33  | 1.34  | 1.32  | 1.32  | 1.32  | 1.32  | 1.32  | 0.5%  |
| Total                      | 2.14  | 2.31  | 2.31  | 2.32  | 2.33  | 2.35  | 2.37  | 2.40  | 2.42  | 2.45  | 2.46  | 2.49  | 2.52  | 2.54  | 2.56  | 2.58  | 2.61  | 2.61  | 2.62  | 2.64  | 2.65  | 2.67  | 1.0%  |
| Commercial                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel            | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.1%  |
| Residual Fuel              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 1.5%  |
| Kerosene                   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.4%  |
| Liquefied Petroleum Gas    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 1.2%  |
| Motor Gasoline 2/          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -0.3% |
| Petroleum Subtotal         | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.3%  |
| Natural Gas                | 0.28  | 0.31  | 0.32  | 0.32  | 0.32  | 0.33  | 0.33  | 0.33  | 0.34  | 0.34  | 0.35  | 0.35  | 0.35  | 0.36  | 0.36  | 0.36  | 0.36  | 0.37  | 0.37  | 0.37  | 0.37  | 0.37  | 1.3%  |
| Coal                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 1.3%  |
| Renewable Energy 3/        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.0%  |
| Electricity                | 0.45  | 0.47  | 0.48  | 0.49  | 0.50  | 0.51  | 0.52  | 0.52  | 0.53  | 0.54  | 0.55  | 0.56  | 0.57  | 0.58  | 0.58  | 0.59  | 0.59  | 0.60  | 0.60  | 0.60  | 0.60  | 0.60  | 1.3%  |
| Delivered Energy           | 0.75  | 0.81  | 0.82  | 0.83  | 0.85  | 0.86  | 0.87  | 0.88  | 0.89  | 0.90  | 0.92  | 0.93  | 0.94  | 0.96  | 0.97  | 0.97  | 0.98  | 0.99  | 0.99  | 0.99  | 0.99  | 0.99  | 1.3%  |
| Electricity Related Losses | 0.99  | 1.03  | 1.02  | 1.02  | 1.02  | 1.01  | 1.02  | 1.03  | 1.04  | 1.05  | 1.05  | 1.06  | 1.06  | 1.07  | 1.07  | 1.07  | 1.06  | 1.04  | 1.04  | 1.02  | 1.01  | 1.00  | 0.0%  |
| Total                      | 1.74  | 1.83  | 1.84  | 1.86  | 1.86  | 1.87  | 1.89  | 1.91  | 1.93  | 1.95  | 1.96  | 1.99  | 2.01  | 2.02  | 2.04  | 2.04  | 2.04  | 2.03  | 2.03  | 2.02  | 2.00  | 1.99  | 0.6%  |
| Industrial 4/              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel            | 0.21  | 0.21  | 0.21  | 0.22  | 0.22  | 0.23  | 0.23  | 0.24  | 0.24  | 0.24  | 0.25  | 0.25  | 0.25  | 0.25  | 0.26  | 0.26  | 0.26  | 0.27  | 0.27  | 0.27  | 0.28  | 0.28  | 1.3%  |
| Liquefied Petroleum Gas    | 1.65  | 1.75  | 1.77  | 1.78  | 1.81  | 1.82  | 1.83  | 1.84  | 1.86  | 1.88  | 1.90  | 1.92  | 1.94  | 1.97  | 1.99  | 2.02  | 2.04  | 2.05  | 2.07  | 2.08  | 2.10  | 2.13  | 1.1%  |
| Petrochemical Feedstocks   | 0.71  | 0.66  | 0.67  | 0.69  | 0.71  | 0.73  | 0.75  | 0.77  | 0.78  | 0.79  | 0.80  | 0.81  | 0.81  | 0.82  | 0.84  | 0.85  | 0.85  | 0.86  | 0.87  | 0.87  | 0.88  | 0.89  | 1.1%  |
| Residual Fuel              | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 1.1%  |
| Motor Gasoline 2/          | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 1.4%  |
| Other Petroleum 5/         | 1.24  | 1.31  | 1.34  | 1.35  | 1.34  | 1.36  | 1.38  | 1.40  | 1.43  | 1.42  | 1.43  | 1.44  | 1.44  | 1.44  | 1.45  | 1.45  | 1.47  | 1.47  | 1.47  | 1.48  | 1.48  | 1.48  | 0.8%  |
| Petroleum Subtotal         | 3.86  | 3.99  | 4.05  | 4.09  | 4.14  | 4.20  | 4.25  | 4.30  | 4.37  | 4.40  | 4.43  | 4.47  | 4.50  | 4.54  | 4.59  | 4.64  | 4.68  | 4.71  | 4.74  | 4.77  | 4.81  | 4.85  | 1.0%  |
| Natural Gas 6/             | 4.14  | 3.97  | 3.95  | 3.99  | 4.09  | 4.17  | 4.25  | 4.34  | 4.38  | 4.43  | 4.45  | 4.50  | 4.53  | 4.57  | 4.61  | 4.66  | 4.71  | 4.73  | 4.76  | 4.79  | 4.82  | 4.84  | 0.7%  |
| Metallurgical Coal         | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Steam Coal                 | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.2%  |
| Net Coal Coke Imports      | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 7.0%  |
| Coal Subtotal              | 0.10  | 0.11  | 0.11  | 0.11  | 0.11  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 1.2%  |
| Renewable Energy 7/        | 0.22  | 0.23  | 0.23  | 0.24  | 0.24  | 0.24  | 0.25  | 0.25  | 0.25  | 0.26  | 0.26  | 0.26  | 0.27  | 0.27  | 0.27  | 0.28  | 0.28  | 0.29  | 0.29  | 0.29  | 0.29  | 0.30  | 1.4%  |
| Electricity                | 0.53  | 0.54  | 0.54  | 0.55  | 0.56  | 0.57  | 0.58  | 0.59  | 0.60  | 0.61  | 0.61  | 0.62  | 0.63  | 0.63  | 0.64  | 0.65  | 0.67  | 0.67  | 0.68  | 0.69  | 0.70  | 0.70  | 1.3%  |
| Delivered Energy           | 8.85  | 8.83  | 8.88  | 8.97  | 9.15  | 9.30  | 9.46  | 9.60  | 9.73  | 9.82  | 9.88  | 9.99  | 10.04 | 10.14 | 10.24 | 10.36 | 10.47 | 10.53 | 10.60 | 10.67 | 10.75 | 10.83 | 0.9%  |
| Electricity Related Losses | 1.17  | 1.17  | 1.14  | 1.14  | 1.14  | 1.15  | 1.16  | 1.17  | 1.19  | 1.19  | 1.17  | 1.18  | 1.17  | 1.17  | 1.18  | 1.18  | 1.19  | 1.17  | 1.18  | 1.17  | 1.16  | 1.16  | 0.0%  |
| Total                      | 10.02 | 10.01 | 10.03 | 10.12 | 10.29 | 10.44 | 10.62 | 10.77 | 10.92 | 11.00 | 11.05 | 11.16 | 11.22 | 11.31 | 11.42 | 11.54 | 11.66 | 11.70 | 11.78 | 11.84 | 11.91 | 11.99 | 0.8%  |

**Table 7. Energy Consumption by Sector and Source (2 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**07 - West South Central**

1998-

|  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Transportation                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 0.81  | 0.84  | 0.85  | 0.87  | 0.89  | 0.90  | 0.92  | 0.93  | 0.94  | 0.95  | 0.96  | 0.97  | 0.98  | 0.98  | 1.00  | 1.01  | 1.02  | 1.03  | 1.04  | 1.04  | 1.05  | 1.06  | 1.3%  |
| Jet Fuel 8/                              | 0.79  | 0.84  | 0.86  | 0.89  | 0.93  | 0.96  | 1.00  | 1.03  | 1.07  | 1.10  | 1.13  | 1.17  | 1.20  | 1.24  | 1.27  | 1.32  | 1.35  | 1.39  | 1.43  | 1.47  | 1.51  | 1.54  | 3.1%  |
| Motor Gasoline 2/                        | 1.90  | 1.97  | 2.02  | 2.06  | 2.09  | 2.14  | 2.18  | 2.22  | 2.26  | 2.30  | 2.34  | 2.38  | 2.41  | 2.44  | 2.47  | 2.51  | 2.54  | 2.57  | 2.60  | 2.63  | 2.66  | 2.69  | 1.6%  |
| Residual Fuel                            | 0.21  | 0.22  | 0.23  | 0.23  | 0.24  | 0.25  | 0.26  | 0.27  | 0.28  | 0.28  | 0.29  | 0.30  | 0.31  | 0.32  | 0.32  | 0.33  | 0.34  | 0.35  | 0.36  | 0.37  | 0.38  | 0.39  | 2.9%  |
| Liquefied Petroleum Gas                  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 5.0%  |
| Other Petroleum 9/                       | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 1.1%  |
| Petroleum Subtotal                       | 3.75  | 3.92  | 4.02  | 4.11  | 4.21  | 4.31  | 4.41  | 4.51  | 4.61  | 4.70  | 4.79  | 4.89  | 4.96  | 5.05  | 5.13  | 5.24  | 5.33  | 5.42  | 5.50  | 5.58  | 5.67  | 5.76  | 2.0%  |
| Pipeline Fuel Natural Gas                | 0.19  | 0.20  | 0.19  | 0.19  | 0.19  | 0.19  | 0.20  | 0.21  | 0.21  | 0.22  | 0.22  | 0.23  | 0.23  | 0.23  | 0.24  | 0.24  | 0.24  | 0.24  | 0.25  | 0.25  | 0.25  | 0.24  | 1.1%  |
| Compressed Natural Gas                   | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 13.3% |
| Renewables (E85) 10/                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 16.6% |
| Methanol (M85) 11/                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 14.5% |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Electricity                              | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 4.4%  |
| Delivered Energy                         | 3.95  | 4.14  | 4.23  | 4.33  | 4.43  | 4.54  | 4.65  | 4.76  | 4.87  | 4.97  | 5.06  | 5.17  | 5.25  | 5.34  | 5.44  | 5.55  | 5.65  | 5.74  | 5.82  | 5.91  | 6.00  | 6.08  | 2.0%  |
| Electricity Related Losses               | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 3.1%  |
| Total                                    | 3.97  | 4.16  | 4.25  | 4.35  | 4.45  | 4.56  | 4.67  | 4.79  | 4.89  | 4.99  | 5.09  | 5.20  | 5.28  | 5.37  | 5.47  | 5.58  | 5.68  | 5.77  | 5.85  | 5.94  | 6.03  | 6.12  | 2.0%  |
| Delivered Energy Consumption All Sectors |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 1.03  | 1.06  | 1.08  | 1.10  | 1.13  | 1.15  | 1.17  | 1.18  | 1.20  | 1.21  | 1.22  | 1.23  | 1.24  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.32  | 1.33  | 1.34  | 1.36  | 1.2%  |
| Kerosene                                 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -0.3% |
| Jet Fuel 8/                              | 0.79  | 0.84  | 0.86  | 0.89  | 0.93  | 0.96  | 1.00  | 1.03  | 1.07  | 1.10  | 1.13  | 1.17  | 1.20  | 1.24  | 1.27  | 1.32  | 1.35  | 1.39  | 1.43  | 1.47  | 1.51  | 1.54  | 3.1%  |
| Liquefied Petroleum Gas                  | 1.69  | 1.79  | 1.81  | 1.83  | 1.85  | 1.86  | 1.87  | 1.88  | 1.90  | 1.93  | 1.95  | 1.97  | 1.98  | 2.01  | 2.04  | 2.06  | 2.08  | 2.09  | 2.11  | 2.13  | 2.15  | 2.17  | 1.1%  |
| Motor Gasoline 2/                        | 1.93  | 2.01  | 2.06  | 2.10  | 2.13  | 2.17  | 2.22  | 2.26  | 2.30  | 2.34  | 2.38  | 2.42  | 2.45  | 2.48  | 2.52  | 2.55  | 2.59  | 2.62  | 2.65  | 2.68  | 2.71  | 2.74  | 1.6%  |
| Petroleum Feedstocks                     | 0.71  | 0.66  | 0.67  | 0.69  | 0.71  | 0.73  | 0.75  | 0.77  | 0.78  | 0.79  | 0.80  | 0.81  | 0.81  | 0.82  | 0.84  | 0.85  | 0.85  | 0.86  | 0.87  | 0.87  | 0.88  | 0.89  | 1.1%  |
| Residual Fuel                            | 0.22  | 0.24  | 0.24  | 0.25  | 0.26  | 0.27  | 0.27  | 0.28  | 0.29  | 0.30  | 0.31  | 0.32  | 0.32  | 0.33  | 0.34  | 0.35  | 0.36  | 0.37  | 0.38  | 0.39  | 0.39  | 0.40  | 2.8%  |
| Other Petroleum 12/                      | 1.28  | 1.36  | 1.39  | 1.40  | 1.39  | 1.41  | 1.43  | 1.45  | 1.48  | 1.48  | 1.48  | 1.49  | 1.49  | 1.50  | 1.50  | 1.51  | 1.52  | 1.53  | 1.53  | 1.53  | 1.54  | 1.54  | 0.8%  |
| Petroleum Subtotal                       | 7.66  | 7.97  | 8.12  | 8.26  | 8.40  | 8.56  | 8.72  | 8.86  | 9.02  | 9.15  | 9.27  | 9.41  | 9.51  | 9.64  | 9.77  | 9.92  | 10.06 | 10.17 | 10.28 | 10.40 | 10.52 | 10.65 | 1.5%  |
| Natural Gas 6/                           | 4.99  | 4.93  | 4.91  | 4.95  | 5.07  | 5.16  | 5.25  | 5.35  | 5.41  | 5.46  | 5.50  | 5.56  | 5.60  | 5.65  | 5.71  | 5.77  | 5.83  | 5.86  | 5.89  | 5.93  | 5.96  | 5.99  | 0.8%  |
| Metallurgical Coal                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Steam Coal                               | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.2%  |
| Net Coal Coke Imports                    | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 7.0%  |
| Coal Subtotal                            | 0.10  | 0.11  | 0.11  | 0.11  | 0.11  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 1.2%  |
| Renewable Energy 13/                     | 0.24  | 0.25  | 0.25  | 0.26  | 0.26  | 0.27  | 0.27  | 0.28  | 0.28  | 0.29  | 0.29  | 0.29  | 0.30  | 0.30  | 0.31  | 0.31  | 0.32  | 0.32  | 0.32  | 0.33  | 0.33  | 0.33  | 1.6%  |
| Methanol (M85) 11/                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 14.5% |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |
| Electricity                              | 1.52  | 1.59  | 1.61  | 1.64  | 1.67  | 1.70  | 1.74  | 1.76  | 1.79  | 1.82  | 1.85  | 1.88  | 1.91  | 1.94  | 1.96  | 1.99  | 2.02  | 2.04  | 2.06  | 2.08  | 2.10  | 2.13  | 1.5%  |
| Delivered Energy                         | 14.51 | 14.84 | 15.01 | 15.23 | 15.52 | 15.81 | 16.10 | 16.38 | 16.63 | 16.85 | 17.04 | 17.28 | 17.45 | 17.66 | 17.88 | 18.13 | 18.37 | 18.54 | 18.71 | 18.88 | 19.07 | 19.25 | 1.3%  |
| Electricity Related Losses               | 3.36  | 3.46  | 3.41  | 3.41  | 3.41  | 3.41  | 3.45  | 3.49  | 3.53  | 3.55  | 3.52  | 3.57  | 3.58  | 3.58  | 3.60  | 3.61  | 3.63  | 3.57  | 3.57  | 3.55  | 3.52  | 3.52  | 0.2%  |
| Total                                    | 17.87 | 18.30 | 18.42 | 18.64 | 18.93 | 19.23 | 19.55 | 19.87 | 20.16 | 20.40 | 20.56 | 20.84 | 21.03 | 21.25 | 21.49 | 21.74 | 21.99 | 22.11 | 22.28 | 22.43 | 22.59 | 22.77 | 1.1%  |
| Electric Generators 14/                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 4.2%  |
| Residual Fuel                            | 0.01  | 0.01  | 0.01  | 0.01  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -8.9% |
| Petroleum Subtotal                       | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -5.2% |
| Natural Gas                              | 1.89  | 1.88  | 1.79  | 1.78  | 1.88  | 1.90  | 1.96  | 2.01  | 2.11  | 2.18  | 2.19  | 2.25  | 2.29  | 2.33  | 2.37  | 2.44  | 2.54  | 2.56  | 2.57  | 2.59  | 2.63  | 2.65  | 1.5%  |
| Steam Coal                               | 2.24  | 2.41  | 2.45  | 2.49  | 2.40  | 2.40  | 2.41  | 2.40  | 2.37  | 2.32  | 2.32  | 2.32  | 2.32  | 2.32  | 2.32  | 2.32  | 2.32  | 2.32  | 2.33  | 2.33  | 2.33  | 2.33  | 0.2%  |
| Nuclear Power                            | 0.66  | 0.67  | 0.68  | 0.68  | 0.68  | 0.68  | 0.68  | 0.68  | 0.68  | 0.68  | 0.68  | 0.69  | 0.69  | 0.69  | 0.69  | 0.65  | 0.59  | 0.54  | 0.54  | 0.52  | 0.47  | 0.47  | -1.5% |
| Renewable Energy 15/                     | 0.08  | 0.08  | 0.10  | 0.11  | 0.11  | 0.13  | 0.13  | 0.15  | 0.16  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 4.2%  |
| Electricity Imports 16/                  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -1.8% |
| Total                                    | 4.88  | 5.05  | 5.03  | 5.06  | 5.08  | 5.12  | 5.18  | 5.26  | 5.32  | 5.37  | 5.38  | 5.44  | 5.48  | 5.52  | 5.57  | 5.60  | 5.65  | 5.62  | 5.63  | 5.63  | 5.63  | 5.64  | 0.7%  |

**Table 7. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
07 - West South Central**

1998 -

|                                   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Total Energy Consumption          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Distillate Fuel                   | 1.03   | 1.07   | 1.08   | 1.11   | 1.13   | 1.15   | 1.17   | 1.19   | 1.20   | 1.21   | 1.22   | 1.23   | 1.24   | 1.26   | 1.27   | 1.29   | 1.30   | 1.31   | 1.32   | 1.34   | 1.35   | 1.36   | 1.3%  |
| Kerosene                          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -0.3% |
| Jet Fuel 8/                       | 0.79   | 0.84   | 0.86   | 0.89   | 0.93   | 0.96   | 1.00   | 1.03   | 1.07   | 1.10   | 1.13   | 1.17   | 1.20   | 1.24   | 1.27   | 1.32   | 1.35   | 1.39   | 1.43   | 1.47   | 1.51   | 1.54   | 3.1%  |
| Liquefied Petroleum Gas           | 1.69   | 1.79   | 1.81   | 1.83   | 1.85   | 1.86   | 1.87   | 1.88   | 1.90   | 1.93   | 1.95   | 1.97   | 1.98   | 2.01   | 2.04   | 2.06   | 2.08   | 2.09   | 2.11   | 2.13   | 2.15   | 2.17   | 1.1%  |
| Motor Gasoline 2/                 | 1.93   | 2.01   | 2.06   | 2.10   | 2.13   | 2.17   | 2.22   | 2.26   | 2.30   | 2.34   | 2.38   | 2.42   | 2.45   | 2.48   | 2.52   | 2.55   | 2.59   | 2.62   | 2.65   | 2.68   | 2.71   | 2.74   | 1.6%  |
| Petrochemical Feedstocks          | 0.71   | 0.66   | 0.67   | 0.69   | 0.71   | 0.73   | 0.75   | 0.77   | 0.78   | 0.79   | 0.80   | 0.81   | 0.81   | 0.82   | 0.84   | 0.85   | 0.85   | 0.86   | 0.87   | 0.87   | 0.88   | 0.89   | 1.1%  |
| Residual Fuel                     | 0.23   | 0.24   | 0.25   | 0.26   | 0.26   | 0.27   | 0.28   | 0.29   | 0.29   | 0.30   | 0.31   | 0.32   | 0.33   | 0.33   | 0.34   | 0.35   | 0.36   | 0.37   | 0.38   | 0.39   | 0.40   | 0.41   | 2.6%  |
| Other Petroleum 12/               | 1.28   | 1.36   | 1.39   | 1.40   | 1.39   | 1.41   | 1.43   | 1.45   | 1.48   | 1.48   | 1.48   | 1.49   | 1.49   | 1.50   | 1.50   | 1.51   | 1.52   | 1.53   | 1.53   | 1.53   | 1.54   | 1.54   | 0.8%  |
| Petroleum Subtotal                | 7.67   | 7.98   | 8.13   | 8.26   | 8.41   | 8.57   | 8.72   | 8.87   | 9.03   | 9.15   | 9.27   | 9.41   | 9.51   | 9.64   | 9.77   | 9.92   | 10.06  | 10.17  | 10.29  | 10.40  | 10.53  | 10.65  | 1.5%  |
| Natural Gas                       | 6.88   | 6.81   | 6.70   | 6.73   | 6.94   | 7.06   | 7.21   | 7.36   | 7.52   | 7.65   | 7.68   | 7.82   | 7.89   | 7.98   | 8.08   | 8.21   | 8.37   | 8.42   | 8.47   | 8.52   | 8.60   | 8.64   | 1.0%  |
| Metallurgical Coal                | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Steam Coal                        | 2.34   | 2.51   | 2.54   | 2.58   | 2.50   | 2.50   | 2.51   | 2.50   | 2.46   | 2.42   | 2.42   | 2.42   | 2.42   | 2.42   | 2.42   | 2.42   | 2.42   | 2.43   | 2.43   | 2.43   | 2.43   | 2.43   | 0.2%  |
| Net Coal Coke Imports             | 0.01   | 0.01   | 0.01   | 0.01   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 7.0%  |
| Coal Subtotal                     | 2.35   | 2.52   | 2.56   | 2.60   | 2.52   | 2.52   | 2.52   | 2.52   | 2.49   | 2.44   | 2.44   | 2.44   | 2.45   | 2.45   | 2.45   | 2.45   | 2.45   | 2.45   | 2.46   | 2.46   | 2.46   | 2.46   | 0.2%  |
| Nuclear Power                     | 0.66   | 0.67   | 0.68   | 0.68   | 0.68   | 0.68   | 0.68   | 0.68   | 0.68   | 0.68   | 0.68   | 0.69   | 0.69   | 0.69   | 0.69   | 0.65   | 0.59   | 0.54   | 0.54   | 0.52   | 0.47   | 0.47   | -1.5% |
| Renewable Energy 17/              | 0.31   | 0.33   | 0.35   | 0.37   | 0.38   | 0.39   | 0.41   | 0.43   | 0.44   | 0.46   | 0.47   | 0.47   | 0.48   | 0.48   | 0.49   | 0.50   | 0.50   | 0.51   | 0.51   | 0.51   | 0.52   | 0.52   | 2.4%  |
| Methanol (M85) 11/                | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 14.5% |
| Liquid Hydrogen                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Electricity Imports 16/           | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -1.8% |
| Total                             | 17.87  | 18.30  | 18.42  | 18.64  | 18.93  | 19.23  | 19.55  | 19.87  | 20.16  | 20.40  | 20.56  | 20.84  | 21.03  | 21.25  | 21.49  | 21.74  | 21.99  | 22.11  | 22.28  | 22.43  | 22.59  | 22.77  | 1.1%  |
| Energy Use & Related Statistics   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Delivered Energy Use              | 14.51  | 14.84  | 15.01  | 15.23  | 15.52  | 15.81  | 16.10  | 16.38  | 16.63  | 16.85  | 17.04  | 17.28  | 17.45  | 17.66  | 17.88  | 18.13  | 18.37  | 18.54  | 18.71  | 18.88  | 19.07  | 19.25  | 1.3%  |
| Total Energy Use                  | 17.87  | 18.30  | 18.42  | 18.64  | 18.93  | 19.23  | 19.55  | 19.87  | 20.16  | 20.40  | 20.56  | 20.84  | 21.03  | 21.25  | 21.49  | 21.74  | 21.99  | 22.11  | 22.28  | 22.43  | 22.59  | 22.77  | 1.1%  |
| Population (millions)             | 30.05  | 30.77  | 31.13  | 31.49  | 31.84  | 32.19  | 32.55  | 32.90  | 33.26  | 33.63  | 34.01  | 34.40  | 34.80  | 35.21  | 35.61  | 36.00  | 36.39  | 36.78  | 37.18  | 37.56  | 37.95  | 38.32  | 1.1%  |
| US GDP (billion 1992 dollars)     | 7552   | 7991   | 8191   | 8377   | 8596   | 8824   | 9056   | 9251   | 9449   | 9651   | 9840   | 10054  | 10218  | 10416  | 10648  | 10906  | 11147  | 11331  | 11533  | 11741  | 11959  | 12179  | 2.2%  |
| Total Carbon Emis.(mill. m. tons) | 1485.4 | 1552.4 | 1575.6 | 1599.5 | 1628.5 | 1657.5 | 1683.4 | 1707.8 | 1730.6 | 1750.9 | 1767.1 | 1786.6 | 1802.6 | 1821.3 | 1842.3 | 1865.8 | 1893.4 | 1908.8 | 1927.8 | 1944.7 | 1961.6 | 1979.2 | 1.3%  |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10

percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 8. Energy Consumption by Sector and Source (1 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
08 - Mountain**

1998 -

|                            | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <b>Energy Consumption</b>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| <b>Residential</b>         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -1.1% |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.5%  |
| Liquefied Petroleum Gas    | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.5%  |
| Petroleum Subtotal         | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.2%  |
| Natural Gas                | 0.26 | 0.29 | 0.30 | 0.31 | 0.31 | 0.32 | 0.32 | 0.33 | 0.33 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.38 | 1.6%  |
| Coal                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.1% |
| Renewable Energy 1/        | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.7%  |
| Electricity                | 0.21 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.26 | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.31 | 0.32 | 0.32 | 0.33 | 2.0%  |
| Delivered Energy           | 0.54 | 0.59 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.66 | 0.67 | 0.69 | 0.69 | 0.70 | 0.71 | 0.72 | 0.72 | 0.73 | 0.74 | 0.75 | 0.75 | 0.76 | 0.77 | 0.78 | 1.7%  |
| Electricity Related Losses | 0.75 | 0.80 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.82 | 0.83 | 0.82 | 0.82 | 0.83 | 0.83 | 0.84 | 0.84 | 0.85 | 0.86 | 0.87 | 0.88 | 0.89 | 0.91 | 0.9%  |
| Total                      | 1.29 | 1.39 | 1.41 | 1.43 | 1.44 | 1.45 | 1.47 | 1.48 | 1.50 | 1.51 | 1.52 | 1.53 | 1.54 | 1.55 | 1.56 | 1.57 | 1.59 | 1.60 | 1.62 | 1.64 | 1.66 | 1.69 | 1.2%  |
| <b>Commercial</b>          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.5%  |
| Residual Fuel              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.5%  |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.1%  |
| Liquefied Petroleum Gas    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 1.6%  |
| Motor Gasoline 2/          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Petroleum Subtotal         | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.6%  |
| Natural Gas                | 0.21 | 0.23 | 0.23 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 1.5%  |
| Coal                       | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 1.8%  |
| Renewable Energy 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0%  |
| Electricity                | 0.24 | 0.26 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.31 | 0.31 | 0.32 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.37 | 1.9%  |
| Delivered Energy           | 0.49 | 0.52 | 0.54 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.61 | 0.62 | 0.63 | 0.64 | 0.65 | 0.65 | 0.66 | 0.67 | 0.67 | 0.68 | 0.68 | 0.69 | 0.70 | 1.7%  |
| Electricity Related Losses | 0.86 | 0.92 | 0.93 | 0.94 | 0.94 | 0.93 | 0.94 | 0.94 | 0.95 | 0.95 | 0.96 | 0.96 | 0.97 | 0.97 | 0.97 | 0.98 | 0.98 | 0.99 | 0.99 | 1.00 | 1.02 | 1.03 | 0.8%  |
| Total                      | 1.35 | 1.44 | 1.47 | 1.49 | 1.49 | 1.49 | 1.51 | 1.52 | 1.55 | 1.56 | 1.57 | 1.58 | 1.60 | 1.61 | 1.63 | 1.64 | 1.65 | 1.66 | 1.67 | 1.69 | 1.71 | 1.72 | 1.1%  |
| <b>Industrial 4/</b>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 1.5%  |
| Liquefied Petroleum Gas    | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 1.1%  |
| Petrochemical Feedstocks   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.1%  |
| Residual Fuel              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0%  |
| Motor Gasoline 2/          | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 1.6%  |
| Other Petroleum 5/         | 0.22 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.24 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 0.26 | 0.9%  |
| Petroleum Subtotal         | 0.41 | 0.41 | 0.41 | 0.42 | 0.43 | 0.43 | 0.44 | 0.45 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.48 | 0.48 | 0.49 | 0.50 | 0.50 | 0.51 | 0.51 | 0.52 | 0.53 | 1.1%  |
| Natural Gas 6/             | 0.44 | 0.46 | 0.47 | 0.47 | 0.49 | 0.49 | 0.50 | 0.51 | 0.52 | 0.52 | 0.53 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.59 | 0.60 | 0.61 | 0.62 | 0.63 | 0.64 | 1.7%  |
| Metallurgical Coal         | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -1.6% |
| Steam Coal                 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 1.0%  |
| Net Coal Coke Imports      | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 9.5%  |
| Coal Subtotal              | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.7%  |
| Renewable Energy 7/        | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 1.0%  |
| Electricity                | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.27 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.33 | 1.4%  |
| Delivered Energy           | 1.29 | 1.31 | 1.32 | 1.35 | 1.37 | 1.40 | 1.42 | 1.44 | 1.46 | 1.48 | 1.49 | 1.51 | 1.52 | 1.54 | 1.57 | 1.60 | 1.63 | 1.65 | 1.67 | 1.69 | 1.71 | 1.73 | 1.4%  |
| Electricity Related Losses | 0.85 | 0.85 | 0.84 | 0.85 | 0.85 | 0.84 | 0.84 | 0.84 | 0.85 | 0.85 | 0.84 | 0.84 | 0.84 | 0.84 | 0.85 | 0.86 | 0.87 | 0.87 | 0.88 | 0.89 | 0.90 | 0.92 | 0.3%  |
| Total                      | 2.14 | 2.16 | 2.16 | 2.19 | 2.22 | 2.23 | 2.26 | 2.28 | 2.31 | 2.32 | 2.33 | 2.34 | 2.36 | 2.38 | 2.42 | 2.45 | 2.49 | 2.51 | 2.55 | 2.58 | 2.62 | 2.65 | 1.0%  |

**Table 8. Energy Consumption by Sector and Source (2 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
08 - Mountain**

1998-

|  | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020   |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| Transportation                           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Distillate Fuel                          | 0.41 | 0.43 | 0.44 | 0.46 | 0.47 | 0.48 | 0.49 | 0.50 | 0.51 | 0.52 | 0.52 | 0.53 | 0.53 | 0.54 | 0.54 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.62 | 1.9%   |
| Jet Fuel 8/                              | 0.19 | 0.21 | 0.22 | 0.23 | 0.23 | 0.24 | 0.25 | 0.26 | 0.27 | 0.28 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.33 | 0.34 | 0.35 | 0.36 | 0.38 | 0.39 | 0.40 | 3.4%   |
| Motor Gasoline 2/                        | 1.00 | 1.06 | 1.10 | 1.14 | 1.17 | 1.21 | 1.25 | 1.28 | 1.31 | 1.34 | 1.38 | 1.41 | 1.43 | 1.45 | 1.48 | 1.51 | 1.54 | 1.57 | 1.60 | 1.64 | 1.68 | 1.72 | 2.5%   |
| Residual Fuel                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A    |
| Liquefied Petroleum Gas                  | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 5.6%   |
| Other Petroleum 9/                       | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 1.9%   |
| Petroleum Subtotal                       | 1.62 | 1.73 | 1.79 | 1.85 | 1.91 | 1.97 | 2.02 | 2.08 | 2.13 | 2.17 | 2.22 | 2.26 | 2.30 | 2.34 | 2.38 | 2.43 | 2.49 | 2.54 | 2.59 | 2.65 | 2.71 | 2.78 | 2.5%   |
| Pipeline Fuel Natural Gas                | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 1.6%   |
| Compressed Natural Gas                   | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 14.5%  |
| Renewables (E85) 10/                     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 17.7%  |
| Methanol (M85) 11/                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 15.6%  |
| Liquid Hydrogen                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A    |
| Electricity                              | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 5.3%   |
| Delivered Energy                         | 1.74 | 1.86 | 1.93 | 2.00 | 2.06 | 2.12 | 2.18 | 2.24 | 2.29 | 2.34 | 2.39 | 2.44 | 2.48 | 2.52 | 2.57 | 2.62 | 2.68 | 2.74 | 2.80 | 2.86 | 2.93 | 3.01 | 2.5%   |
| Electricity Related Losses               | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 4.1%   |
| Total                                    | 1.76 | 1.88 | 1.94 | 2.01 | 2.08 | 2.14 | 2.20 | 2.26 | 2.31 | 2.36 | 2.41 | 2.46 | 2.50 | 2.54 | 2.59 | 2.65 | 2.71 | 2.77 | 2.83 | 2.90 | 2.97 | 3.04 | 2.5%   |
| Delivered Energy Consumption All Sectors |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Distillate Fuel                          | 0.56 | 0.59 | 0.60 | 0.62 | 0.64 | 0.65 | 0.67 | 0.68 | 0.69 | 0.70 | 0.70 | 0.71 | 0.71 | 0.72 | 0.73 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.81 | 0.82 | 1.8%   |
| Kerosene                                 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.7%   |
| Jet Fuel 8/                              | 0.19 | 0.21 | 0.22 | 0.23 | 0.23 | 0.24 | 0.25 | 0.26 | 0.27 | 0.28 | 0.29 | 0.30 | 0.30 | 0.31 | 0.32 | 0.33 | 0.34 | 0.35 | 0.36 | 0.38 | 0.39 | 0.40 | 3.4%   |
| Liquefied Petroleum Gas                  | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 1.3%   |
| Motor Gasoline 2/                        | 1.02 | 1.08 | 1.13 | 1.17 | 1.20 | 1.24 | 1.27 | 1.31 | 1.34 | 1.37 | 1.40 | 1.43 | 1.46 | 1.48 | 1.51 | 1.54 | 1.57 | 1.60 | 1.64 | 1.67 | 1.71 | 1.75 | 2.5%   |
| Petrochemical Feedstocks                 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.1%   |
| Residual Fuel                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.1%   |
| Other Petroleum 12/                      | 0.24 | 0.23 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 0.29 | 0.30 | 1.0%   |
| Petroleum Subtotal                       | 2.09 | 2.19 | 2.26 | 2.33 | 2.40 | 2.47 | 2.53 | 2.59 | 2.64 | 2.69 | 2.74 | 2.79 | 2.83 | 2.87 | 2.92 | 2.99 | 3.05 | 3.10 | 3.16 | 3.22 | 3.29 | 3.37 | 2.2%   |
| Natural Gas 6/                           | 1.03 | 1.11 | 1.13 | 1.15 | 1.17 | 1.19 | 1.21 | 1.23 | 1.25 | 1.26 | 1.28 | 1.30 | 1.31 | 1.33 | 1.35 | 1.37 | 1.40 | 1.42 | 1.44 | 1.46 | 1.48 | 1.50 | 1.7%   |
| Metallurgical Coal                       | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -1.6%  |
| Steam Coal                               | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 1.0%   |
| Net Coal Coke Imports                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 9.5%   |
| Coal Subtotal                            | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.7%   |
| Renewable Energy 13/                     | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 1.1%   |
| Methanol (M85) 11/                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 15.6%  |
| Liquid Hydrogen                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A    |
| Electricity                              | 0.70 | 0.73 | 0.75 | 0.77 | 0.78 | 0.80 | 0.82 | 0.84 | 0.85 | 0.87 | 0.88 | 0.90 | 0.91 | 0.93 | 0.94 | 0.95 | 0.97 | 0.98 | 0.99 | 1.01 | 1.02 | 1.03 | 1.8%   |
| Delivered Energy                         | 4.06 | 4.29 | 4.40 | 4.51 | 4.62 | 4.73 | 4.83 | 4.93 | 5.02 | 5.11 | 5.19 | 5.28 | 5.34 | 5.42 | 5.51 | 5.61 | 5.71 | 5.80 | 5.90 | 6.00 | 6.10 | 6.21 | 2.0%   |
| Electricity Related Losses               | 2.48 | 2.58 | 2.60 | 2.62 | 2.61 | 2.59 | 2.61 | 2.61 | 2.65 | 2.65 | 2.64 | 2.64 | 2.66 | 2.67 | 2.69 | 2.70 | 2.73 | 2.74 | 2.77 | 2.81 | 2.85 | 2.89 | 0.7%   |
| Total                                    | 6.54 | 6.87 | 6.99 | 7.13 | 7.23 | 7.32 | 7.44 | 7.54 | 7.67 | 7.76 | 7.83 | 7.92 | 8.00 | 8.09 | 8.19 | 8.31 | 8.44 | 8.55 | 8.67 | 8.81 | 8.95 | 9.10 | 1.5%   |
| Electric Generators 14/                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |        |
| Distillate Fuel                          | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.6%   |
| Residual Fuel                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -24.0% |
| Petroleum Subtotal                       | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.6%   |
| Natural Gas                              | 0.17 | 0.32 | 0.31 | 0.31 | 0.29 | 0.25 | 0.26 | 0.25 | 0.27 | 0.25 | 0.24 | 0.23 | 0.23 | 0.24 | 0.24 | 0.24 | 0.23 | 0.22 | 0.22 | 0.22 | 0.21 | 0.21 | 1.0%   |
| Steam Coal                               | 2.23 | 2.22 | 2.25 | 2.29 | 2.33 | 2.37 | 2.41 | 2.43 | 2.46 | 2.49 | 2.51 | 2.53 | 2.55 | 2.58 | 2.60 | 2.64 | 2.68 | 2.71 | 2.75 | 2.81 | 2.86 | 2.92 | 1.2%   |
| Nuclear Power                            | 0.28 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.3%   |
| Renewable Energy 15/                     | 0.49 | 0.48 | 0.48 | 0.48 | 0.48 | 0.47 | 0.47 | 0.48 | 0.48 | 0.48 | 0.48 | 0.47 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.0%   |
| Electricity Imports 16/                  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.8%  |
| Total                                    | 3.17 | 3.31 | 3.35 | 3.38 | 3.40 | 3.40 | 3.44 | 3.45 | 3.50 | 3.52 | 3.53 | 3.54 | 3.57 | 3.59 | 3.63 | 3.66 | 3.70 | 3.72 | 3.76 | 3.82 | 3.87 | 3.92 | 1.0%   |

**Table 8. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
08 - Mountain**

1998 -

|  | 1998          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 2020        |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| <b>Total Energy Consumption</b>            |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Distillate Fuel                            | 0.56          | 0.59          | 0.61          | 0.63          | 0.64          | 0.66          | 0.67          | 0.68          | 0.69          | 0.70          | 0.71          | 0.71          | 0.72          | 0.73          | 0.74          | 0.75          | 0.76          | 0.77          | 0.78          | 0.80          | 0.81          | 0.82          | 1.8%        |
| Kerosene                                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.7%        |
| Jet Fuel 8/                                | 0.19          | 0.21          | 0.22          | 0.23          | 0.23          | 0.24          | 0.25          | 0.26          | 0.27          | 0.28          | 0.29          | 0.30          | 0.30          | 0.31          | 0.32          | 0.33          | 0.34          | 0.35          | 0.36          | 0.38          | 0.39          | 0.40          | 3.4%        |
| Liquefied Petroleum Gas                    | 0.07          | 0.07          | 0.07          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.09          | 0.09          | 0.09          | 0.09          | 0.09          | 0.09          | 0.09          | 0.09          | 1.3%        |
| Motor Gasoline 2/                          | 1.02          | 1.08          | 1.13          | 1.17          | 1.20          | 1.24          | 1.27          | 1.31          | 1.34          | 1.37          | 1.40          | 1.43          | 1.46          | 1.48          | 1.51          | 1.54          | 1.57          | 1.60          | 1.64          | 1.67          | 1.71          | 1.75          | 2.5%        |
| Petrochemical Feedstocks                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 1.1%        |
| Residual Fuel                              | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | -1.1%       |
| Other Petroleum 12/                        | 0.24          | 0.23          | 0.24          | 0.24          | 0.24          | 0.25          | 0.25          | 0.25          | 0.26          | 0.26          | 0.26          | 0.26          | 0.26          | 0.27          | 0.27          | 0.28          | 0.28          | 0.28          | 0.29          | 0.29          | 0.29          | 0.30          | 1.0%        |
| Petroleum Subtotal                         | 2.09          | 2.20          | 2.27          | 2.34          | 2.40          | 2.47          | 2.53          | 2.59          | 2.65          | 2.70          | 2.75          | 2.80          | 2.83          | 2.88          | 2.93          | 2.99          | 3.05          | 3.11          | 3.16          | 3.23          | 3.30          | 3.37          | 2.2%        |
| Natural Gas                                | 1.20          | 1.43          | 1.44          | 1.46          | 1.46          | 1.44          | 1.47          | 1.48          | 1.51          | 1.52          | 1.52          | 1.53          | 1.54          | 1.57          | 1.59          | 1.61          | 1.62          | 1.64          | 1.66          | 1.68          | 1.69          | 1.72          | 1.6%        |
| Metallurgical Coal                         | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | -1.6%       |
| Steam Coal                                 | 2.33          | 2.32          | 2.36          | 2.40          | 2.44          | 2.48          | 2.52          | 2.54          | 2.57          | 2.60          | 2.62          | 2.65          | 2.67          | 2.69          | 2.72          | 2.76          | 2.80          | 2.83          | 2.87          | 2.93          | 2.98          | 3.04          | 1.2%        |
| Net Coal Coke Imports                      | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 9.5%        |
| Coal Subtotal                              | 2.35          | 2.35          | 2.38          | 2.42          | 2.46          | 2.51          | 2.54          | 2.57          | 2.60          | 2.63          | 2.65          | 2.67          | 2.69          | 2.72          | 2.75          | 2.78          | 2.83          | 2.86          | 2.90          | 2.95          | 3.01          | 3.07          | 1.2%        |
| Nuclear Power                              | 0.28          | 0.29          | 0.29          | 0.29          | 0.29          | 0.29          | 0.29          | 0.29          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.30          | 0.3%        |
| Renewable Energy 17/                       | 0.61          | 0.60          | 0.61          | 0.61          | 0.61          | 0.60          | 0.61          | 0.61          | 0.61          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.63          | 0.63          | 0.63          | 0.64          | 0.64          | 0.64          | 0.64          | 0.2%        |
| Methanol (M85) 11/                         | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 15.6%       |
| Liquid Hydrogen                            | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Electricity Imports 16/                    | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | -1.8%       |
| <b>Total</b>                               | <b>6.54</b>   | <b>6.87</b>   | <b>6.99</b>   | <b>7.13</b>   | <b>7.23</b>   | <b>7.32</b>   | <b>7.44</b>   | <b>7.54</b>   | <b>7.67</b>   | <b>7.76</b>   | <b>7.83</b>   | <b>7.92</b>   | <b>8.00</b>   | <b>8.09</b>   | <b>8.19</b>   | <b>8.31</b>   | <b>8.44</b>   | <b>8.55</b>   | <b>8.67</b>   | <b>8.81</b>   | <b>8.95</b>   | <b>9.10</b>   | <b>1.5%</b> |
| <b>Energy Use &amp; Related Statistics</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Delivered Energy Use                       | 4.06          | 4.29          | 4.40          | 4.51          | 4.62          | 4.73          | 4.83          | 4.93          | 5.02          | 5.11          | 5.19          | 5.28          | 5.34          | 5.42          | 5.51          | 5.61          | 5.71          | 5.80          | 5.90          | 6.00          | 6.10          | 6.21          | 2.0%        |
| Total Energy Use                           | 6.54          | 6.87          | 6.99          | 7.13          | 7.23          | 7.32          | 7.44          | 7.54          | 7.67          | 7.76          | 7.83          | 7.92          | 8.00          | 8.09          | 8.19          | 8.31          | 8.44          | 8.55          | 8.67          | 8.81          | 8.95          | 9.10          | 1.5%        |
| Population (millions)                      | 16.86         | 17.62         | 18.05         | 18.42         | 18.80         | 19.15         | 19.49         | 19.82         | 20.14         | 20.47         | 20.79         | 21.11         | 21.41         | 21.71         | 22.03         | 22.38         | 22.77         | 23.18         | 23.60         | 24.06         | 24.55         | 25.07         | 1.8%        |
| US GDP (billion 1992 dollars)              | 7552          | 7991          | 8191          | 8377          | 8596          | 8824          | 9056          | 9251          | 9449          | 9651          | 9840          | 10054         | 10218         | 10416         | 10648         | 10906         | 11147         | 11331         | 11533         | 11741         | 11959         | 12179         | 2.2%        |
| <b>Total Carbon Emis. (mill. m. tons)</b>  | <b>1485.4</b> | <b>1552.4</b> | <b>1575.6</b> | <b>1599.5</b> | <b>1628.5</b> | <b>1657.5</b> | <b>1683.4</b> | <b>1707.8</b> | <b>1730.6</b> | <b>1750.9</b> | <b>1767.1</b> | <b>1786.6</b> | <b>1802.6</b> | <b>1821.3</b> | <b>1842.3</b> | <b>1865.8</b> | <b>1893.4</b> | <b>1908.8</b> | <b>1927.8</b> | <b>1944.7</b> | <b>1961.6</b> | <b>1979.2</b> | <b>1.3%</b> |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 9. Energy Consumption by Sector and Source (1 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
09 - Pacific**

1998 -

|                            | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <b>Energy Consumption</b>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| <b>Residential</b>         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.1% |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0%  |
| Liquefied Petroleum Gas    | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 3.1%  |
| Petroleum Subtotal         | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 1.7%  |
| Natural Gas                | 0.57 | 0.60 | 0.61 | 0.62 | 0.63 | 0.65 | 0.66 | 0.68 | 0.69 | 0.71 | 0.73 | 0.75 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.80 | 0.81 | 0.82 | 0.83 | 0.83 | 1.8%  |
| Coal                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.3%  |
| Renewable Energy 1/        | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.5%  |
| Electricity                | 0.46 | 0.48 | 0.48 | 0.49 | 0.49 | 0.50 | 0.51 | 0.51 | 0.52 | 0.53 | 0.53 | 0.54 | 0.55 | 0.55 | 0.56 | 0.56 | 0.57 | 0.58 | 0.58 | 0.59 | 0.60 | 0.61 | 1.3%  |
| Delivered Energy           | 1.16 | 1.21 | 1.23 | 1.25 | 1.27 | 1.29 | 1.31 | 1.34 | 1.36 | 1.39 | 1.41 | 1.44 | 1.46 | 1.48 | 1.49 | 1.51 | 1.52 | 1.54 | 1.56 | 1.57 | 1.59 | 1.61 | 1.5%  |
| Electricity Related Losses | 0.75 | 0.81 | 0.80 | 0.83 | 0.83 | 0.79 | 0.79 | 0.81 | 0.80 | 0.82 | 0.84 | 0.84 | 0.86 | 0.88 | 0.88 | 0.89 | 0.90 | 0.90 | 0.93 | 0.94 | 0.93 | 0.94 | 1.0%  |
| Total                      | 1.91 | 2.02 | 2.03 | 2.08 | 2.10 | 2.09 | 2.11 | 2.15 | 2.16 | 2.21 | 2.26 | 2.29 | 2.32 | 2.35 | 2.36 | 2.40 | 2.43 | 2.44 | 2.49 | 2.51 | 2.52 | 2.55 | 1.3%  |
| <b>Commercial</b>          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.1%  |
| Residual Fuel              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.5%  |
| Kerosene                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.3%  |
| Liquefied Petroleum Gas    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.0%  |
| Motor Gasoline 2/          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.3% |
| Petroleum Subtotal         | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.2%  |
| Natural Gas                | 0.33 | 0.34 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.38 | 0.38 | 0.38 | 0.38 | 0.39 | 0.39 | 0.39 | 0.39 | 0.7%  |
| Coal                       | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.8%  |
| Renewable Energy 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0%  |
| Electricity                | 0.48 | 0.52 | 0.53 | 0.54 | 0.55 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.60 | 0.61 | 0.62 | 0.62 | 0.63 | 0.63 | 0.64 | 0.64 | 0.64 | 0.64 | 0.65 | 1.3%  |
| Delivered Energy           | 0.86 | 0.89 | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.97 | 0.98 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.06 | 1.07 | 1.07 | 1.07 | 1.08 | 1.0%  |
| Electricity Related Losses | 0.80 | 0.87 | 0.87 | 0.92 | 0.92 | 0.88 | 0.88 | 0.90 | 0.89 | 0.92 | 0.94 | 0.94 | 0.96 | 0.98 | 0.98 | 0.99 | 1.00 | 0.99 | 1.02 | 1.02 | 1.01 | 1.01 | 1.1%  |
| Total                      | 1.65 | 1.77 | 1.78 | 1.84 | 1.85 | 1.81 | 1.83 | 1.86 | 1.87 | 1.90 | 1.94 | 1.95 | 1.98 | 2.01 | 2.01 | 2.04 | 2.06 | 2.05 | 2.09 | 2.09 | 2.08 | 2.08 | 1.1%  |
| <b>Industrial 4/</b>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Distillate Fuel            | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 1.4%  |
| Liquefied Petroleum Gas    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 1.3%  |
| Petrochemical Feedstocks   | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 1.1%  |
| Residual Fuel              | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.01 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 1.3%  |
| Motor Gasoline 2/          | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 1.6%  |
| Other Petroleum 5/         | 0.70 | 0.75 | 0.75 | 0.74 | 0.75 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.73 | 0.74 | 0.75 | 0.75 | 0.75 | 0.76 | 0.76 | 0.76 | 0.76 | 0.77 | 0.77 | 0.78 | 0.5%  |
| Petroleum Subtotal         | 0.89 | 0.92 | 0.93 | 0.92 | 0.92 | 0.93 | 0.93 | 0.94 | 0.94 | 0.97 | 0.97 | 0.97 | 0.99 | 0.99 | 1.00 | 1.00 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 | 1.04 | 0.7%  |
| Natural Gas 6/             | 1.29 | 1.25 | 1.26 | 1.27 | 1.29 | 1.31 | 1.33 | 1.35 | 1.37 | 1.38 | 1.39 | 1.40 | 1.41 | 1.43 | 1.44 | 1.46 | 1.48 | 1.49 | 1.51 | 1.52 | 1.53 | 1.54 | 0.8%  |
| Metallurgical Coal         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A   |
| Steam Coal                 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 1.0%  |
| Net Coal Coke Imports      | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 9.5%  |
| Coal Subtotal              | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 1.3%  |
| Renewable Energy 7/        | 0.33 | 0.33 | 0.34 | 0.34 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.37 | 0.38 | 0.38 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.40 | 0.40 | 0.9%  |
| Electricity                | 0.39 | 0.40 | 0.41 | 0.42 | 0.43 | 0.43 | 0.44 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.48 | 0.48 | 0.49 | 0.50 | 0.51 | 0.51 | 0.52 | 0.52 | 0.53 | 0.54 | 1.5%  |
| Delivered Energy           | 2.96 | 2.97 | 2.99 | 3.02 | 3.05 | 3.09 | 3.13 | 3.17 | 3.19 | 3.24 | 3.26 | 3.29 | 3.31 | 3.35 | 3.38 | 3.42 | 3.46 | 3.48 | 3.51 | 3.54 | 3.57 | 3.60 | 0.9%  |
| Electricity Related Losses | 0.64 | 0.68 | 0.67 | 0.71 | 0.72 | 0.69 | 0.69 | 0.70 | 0.70 | 0.72 | 0.74 | 0.73 | 0.75 | 0.77 | 0.77 | 0.79 | 0.80 | 0.79 | 0.82 | 0.83 | 0.83 | 0.84 | 1.2%  |
| Total                      | 3.60 | 3.64 | 3.67 | 3.73 | 3.77 | 3.78 | 3.82 | 3.88 | 3.90 | 3.96 | 3.99 | 4.02 | 4.06 | 4.11 | 4.15 | 4.21 | 4.26 | 4.27 | 4.34 | 4.37 | 4.40 | 4.44 | 1.0%  |

**Table 9. Energy Consumption by Sector and Source (2 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)**

1998-

|   | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2020        |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Transportation</b>                           |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Distillate Fuel                                 | 0.55         | 0.57         | 0.58         | 0.59         | 0.60         | 0.61         | 0.62         | 0.63         | 0.64         | 0.64         | 0.65         | 0.66         | 0.67         | 0.68         | 0.69         | 0.70         | 0.71         | 0.71         | 0.72         | 0.72         | 0.73         | 0.73         | 1.3%        |
| Jet Fuel 8/                                     | 0.93         | 0.98         | 1.01         | 1.04         | 1.07         | 1.12         | 1.15         | 1.20         | 1.24         | 1.28         | 1.32         | 1.37         | 1.41         | 1.45         | 1.50         | 1.55         | 1.60         | 1.64         | 1.68         | 1.72         | 1.76         | 1.80         | 3.0%        |
| Motor Gasoline 2/                               | 2.34         | 2.42         | 2.46         | 2.50         | 2.52         | 2.57         | 2.61         | 2.65         | 2.69         | 2.73         | 2.77         | 2.81         | 2.84         | 2.88         | 2.91         | 2.95         | 2.99         | 3.02         | 3.05         | 3.08         | 3.11         | 3.15         | 1.4%        |
| Residual Fuel                                   | 0.26         | 0.28         | 0.29         | 0.29         | 0.30         | 0.31         | 0.32         | 0.34         | 0.35         | 0.36         | 0.37         | 0.38         | 0.39         | 0.40         | 0.42         | 0.43         | 0.44         | 0.45         | 0.46         | 0.47         | 0.48         | 0.49         | 2.9%        |
| Liquefied Petroleum Gas                         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 4.5%        |
| Other Petroleum 9/                              | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 1.0%        |
| Petroleum Subtotal                              | 4.14         | 4.31         | 4.39         | 4.48         | 4.56         | 4.67         | 4.77         | 4.88         | 4.98         | 5.09         | 5.19         | 5.30         | 5.39         | 5.48         | 5.59         | 5.71         | 5.81         | 5.91         | 5.99         | 6.08         | 6.17         | 6.25         | 1.9%        |
| Pipeline Fuel Natural Gas                       | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 1.1%        |
| Compressed Natural Gas                          | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.05         | 0.05         | 0.05         | 0.05         | 12.9%       |
| Renewables (E85) 10/                            | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 16.2%       |
| Methanol (M85) 11/                              | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 14.2%       |
| Liquid Hydrogen                                 | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Electricity                                     | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 4.3%        |
| Delivered Energy                                | 4.21         | 4.38         | 4.47         | 4.56         | 4.65         | 4.76         | 4.87         | 4.99         | 5.10         | 5.21         | 5.31         | 5.43         | 5.53         | 5.63         | 5.74         | 5.86         | 5.97         | 6.07         | 6.16         | 6.25         | 6.34         | 6.43         | 1.9%        |
| Electricity Related Losses                      | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 4.1%        |
| <b>Total</b>                                    | <b>4.23</b>  | <b>4.40</b>  | <b>4.49</b>  | <b>4.58</b>  | <b>4.67</b>  | <b>4.79</b>  | <b>4.89</b>  | <b>5.01</b>  | <b>5.12</b>  | <b>5.24</b>  | <b>5.34</b>  | <b>5.46</b>  | <b>5.56</b>  | <b>5.66</b>  | <b>5.77</b>  | <b>5.90</b>  | <b>6.01</b>  | <b>6.11</b>  | <b>6.20</b>  | <b>6.29</b>  | <b>6.38</b>  | <b>6.47</b>  | <b>2.0%</b> |
| <b>Delivered Energy Consumption All Sectors</b> |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Distillate Fuel                                 | 0.69         | 0.70         | 0.71         | 0.72         | 0.73         | 0.75         | 0.76         | 0.77         | 0.78         | 0.79         | 0.80         | 0.81         | 0.82         | 0.83         | 0.84         | 0.85         | 0.86         | 0.87         | 0.88         | 0.88         | 0.89         | 0.89         | 1.2%        |
| Kerosene  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | -0.2%       |
| Jet Fuel 8/                                     | 0.93         | 0.98         | 1.01         | 1.04         | 1.07         | 1.12         | 1.15         | 1.20         | 1.24         | 1.28         | 1.32         | 1.37         | 1.41         | 1.45         | 1.50         | 1.55         | 1.60         | 1.64         | 1.68         | 1.72         | 1.76         | 1.80         | 3.0%        |
| Liquefied Petroleum Gas                         | 0.07         | 0.07         | 0.08         | 0.08         | 0.08         | 0.08         | 0.09         | 0.09         | 0.09         | 0.10         | 0.10         | 0.11         | 0.11         | 0.11         | 0.11         | 0.11         | 0.11         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 2.5%        |
| Motor Gasoline 2/                               | 2.36         | 2.44         | 2.49         | 2.53         | 2.55         | 2.60         | 2.64         | 2.68         | 2.72         | 2.76         | 2.80         | 2.84         | 2.88         | 2.91         | 2.94         | 2.98         | 3.02         | 3.05         | 3.08         | 3.12         | 3.15         | 3.18         | 1.4%        |
| Petrochemical Feedstocks                        | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 1.1%        |
| Residual Fuel                                   | 0.29         | 0.28         | 0.29         | 0.30         | 0.31         | 0.32         | 0.33         | 0.35         | 0.36         | 0.39         | 0.40         | 0.41         | 0.42         | 0.44         | 0.45         | 0.46         | 0.47         | 0.49         | 0.50         | 0.51         | 0.52         | 0.53         | 2.8%        |
| Other Petroleum 12/                             | 0.75         | 0.80         | 0.80         | 0.79         | 0.79         | 0.79         | 0.79         | 0.79         | 0.79         | 0.79         | 0.79         | 0.79         | 0.80         | 0.81         | 0.81         | 0.81         | 0.82         | 0.82         | 0.83         | 0.83         | 0.83         | 0.84         | 0.5%        |
| Petroleum Subtotal                              | 5.12         | 5.31         | 5.41         | 5.49         | 5.58         | 5.69         | 5.80         | 5.92         | 6.02         | 6.15         | 6.26         | 6.37         | 6.48         | 6.58         | 6.69         | 6.82         | 6.93         | 7.03         | 7.12         | 7.21         | 7.31         | 7.40         | 1.7%        |
| Natural Gas 6/                                  | 2.25         | 2.24         | 2.26         | 2.30         | 2.33         | 2.37         | 2.41         | 2.45         | 2.49         | 2.53         | 2.56         | 2.60         | 2.63         | 2.66         | 2.69         | 2.72         | 2.76         | 2.79         | 2.81         | 2.84         | 2.86         | 2.88         | 1.1%        |
| Metallurgical Coal                              | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Steam Coal                                      | 0.07         | 0.07         | 0.07         | 0.07         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.9%        |
| Net Coal Coke Imports                           | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 9.5%        |
| Coal Subtotal                                   | 0.07         | 0.07         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 1.2%        |
| Renewable Energy 13/                            | 0.40         | 0.41         | 0.41         | 0.42         | 0.43         | 0.43         | 0.44         | 0.44         | 0.44         | 0.45         | 0.45         | 0.46         | 0.46         | 0.46         | 0.47         | 0.47         | 0.48         | 0.48         | 0.49         | 0.49         | 0.49         | 0.50         | 1.0%        |
| Methanol (M85) 11/                              | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 14.2%       |
| Liquid Hydrogen                                 | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Electricity                                     | 1.34         | 1.41         | 1.43         | 1.46         | 1.48         | 1.50         | 1.53         | 1.55         | 1.57         | 1.60         | 1.61         | 1.64         | 1.65         | 1.67         | 1.69         | 1.71         | 1.73         | 1.75         | 1.77         | 1.78         | 1.80         | 1.81         | 1.4%        |
| Delivered Energy                                | 9.18         | 9.46         | 9.60         | 9.75         | 9.90         | 10.09        | 10.26        | 10.46        | 10.63        | 10.82        | 10.98        | 11.17        | 11.32        | 11.48        | 11.65        | 11.83        | 12.01        | 12.16        | 12.29        | 12.44        | 12.57        | 12.71        | 1.5%        |
| Electricity Related Losses                      | 2.21         | 2.37         | 2.37         | 2.48         | 2.50         | 2.38         | 2.39         | 2.43         | 2.42         | 2.48         | 2.55         | 2.55         | 2.60         | 2.65         | 2.66         | 2.71         | 2.75         | 2.72         | 2.82         | 2.83         | 2.81         | 2.83         | 1.1%        |
| <b>Total</b>                                    | <b>11.39</b> | <b>11.83</b> | <b>11.97</b> | <b>12.23</b> | <b>12.40</b> | <b>12.47</b> | <b>12.65</b> | <b>12.89</b> | <b>13.05</b> | <b>13.31</b> | <b>13.53</b> | <b>13.71</b> | <b>13.92</b> | <b>14.13</b> | <b>14.30</b> | <b>14.55</b> | <b>14.76</b> | <b>14.88</b> | <b>15.11</b> | <b>15.26</b> | <b>15.39</b> | <b>15.54</b> | <b>1.4%</b> |
| <b>Electric Generators 14/</b>                  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Distillate Fuel                                 | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | -2.5%       |
| Residual Fuel                                   | 0.10         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.05         | 0.05         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | -2.2%       |
| Petroleum Subtotal                              | 0.12         | 0.06         | 0.06         | 0.06         | 0.07         | 0.07         | 0.07         | 0.07         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | -2.2%       |
| Natural Gas                                     | 0.44         | 0.82         | 0.81         | 0.82         | 0.88         | 0.87         | 0.88         | 0.94         | 0.98         | 1.03         | 1.08         | 1.13         | 1.18         | 1.23         | 1.26         | 1.30         | 1.32         | 1.34         | 1.36         | 1.34         | 1.34         | 1.35         | 5.2%        |
| Steam Coal                                      | 0.19         | 0.15         | 0.16         | 0.17         | 0.18         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | -0.2%       |
| Nuclear Power                                   | 0.42         | 0.42         | 0.42         | 0.42         | 0.42         | 0.42         | 0.42         | 0.42         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.2%        |
| Renewable Energy 15/                            | 2.35         | 2.30         | 2.31         | 2.42         | 2.38         | 2.29         | 2.31         | 2.32         | 2.30         | 2.34         | 2.38         | 2.34         | 2.38         | 2.40         | 2.38         | 2.42         | 2.45         | 2.43         | 2.52         | 2.56         | 2.56         | 2.59         | 0.4%        |
| Electricity Imports 16/                         | 0.03         | 0.04         | 0.04         | 0.05         | 0.05         | 0.04         | 0.04         | 0.04         | 0.04         | 0.03         | 0.03         | 0.02         | 0.03         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | -1.8%       |
| <b>Total</b>                                    | <b>3.55</b>  | <b>3.79</b>  | <b>3.80</b>  | <b>3.94</b>  | <b>3.98</b>  | <b>3.88</b>  | <b>3.91</b>  | <b>3.98</b>  | <b>4.00</b>  | <b>4.08</b>  | <b>4.16</b>  | <b>4.18</b>  | <b>4.26</b>  | <b>4.33</b>  | <b>4.35</b>  | <b>4.43</b>  | <b>4.48</b>  | <b>4.47</b>  | <b>4.58</b>  | <b>4.61</b>  | <b>4.61</b>  | <b>4.65</b>  | <b>1.2%</b> |

**Table 9. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)**

1998 -

|                                   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Total Energy Consumption          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Distillate Fuel                   | 0.70   | 0.71   | 0.72   | 0.73   | 0.74   | 0.75   | 0.77   | 0.78   | 0.79   | 0.80   | 0.81   | 0.82   | 0.82   | 0.83   | 0.85   | 0.86   | 0.87   | 0.88   | 0.89   | 0.89   | 0.90   | 0.90   | 1.2%  |
| Kerosene                          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -0.2% |
| Jet Fuel 8/                       | 0.93   | 0.98   | 1.01   | 1.04   | 1.07   | 1.12   | 1.15   | 1.20   | 1.24   | 1.28   | 1.32   | 1.37   | 1.41   | 1.45   | 1.50   | 1.55   | 1.60   | 1.64   | 1.68   | 1.72   | 1.76   | 1.80   | 3.0%  |
| Liquefied Petroleum Gas           | 0.07   | 0.07   | 0.08   | 0.08   | 0.08   | 0.08   | 0.09   | 0.09   | 0.09   | 0.10   | 0.10   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.11   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 2.5%  |
| Motor Gasoline 2/                 | 2.36   | 2.44   | 2.49   | 2.53   | 2.55   | 2.60   | 2.64   | 2.68   | 2.72   | 2.76   | 2.80   | 2.84   | 2.88   | 2.91   | 2.94   | 2.98   | 3.02   | 3.05   | 3.08   | 3.12   | 3.15   | 3.18   | 1.4%  |
| Petrochemical Feedstocks          | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 1.1%  |
| Residual Fuel                     | 0.39   | 0.34   | 0.35   | 0.35   | 0.36   | 0.38   | 0.39   | 0.41   | 0.41   | 0.44   | 0.46   | 0.47   | 0.48   | 0.49   | 0.51   | 0.52   | 0.53   | 0.54   | 0.56   | 0.57   | 0.58   | 0.59   | 1.9%  |
| Other Petroleum 12/               | 0.75   | 0.80   | 0.80   | 0.79   | 0.79   | 0.79   | 0.79   | 0.79   | 0.79   | 0.79   | 0.79   | 0.79   | 0.80   | 0.81   | 0.81   | 0.81   | 0.82   | 0.82   | 0.83   | 0.83   | 0.83   | 0.84   | 0.5%  |
| Petroleum Subtotal                | 5.23   | 5.37   | 5.48   | 5.56   | 5.64   | 5.76   | 5.86   | 5.99   | 6.08   | 6.22   | 6.32   | 6.44   | 6.54   | 6.65   | 6.76   | 6.88   | 7.00   | 7.09   | 7.19   | 7.28   | 7.38   | 7.47   | 1.6%  |
| Natural Gas                       | 2.69   | 3.06   | 3.07   | 3.12   | 3.22   | 3.25   | 3.30   | 3.39   | 3.47   | 3.56   | 3.64   | 3.73   | 3.80   | 3.88   | 3.95   | 4.02   | 4.08   | 4.12   | 4.17   | 4.18   | 4.20   | 4.23   | 2.1%  |
| Metallurgical Coal                | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Steam Coal                        | 0.27   | 0.22   | 0.23   | 0.24   | 0.25   | 0.26   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.1%  |
| Net Coal Coke Imports             | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 9.5%  |
| Coal Subtotal                     | 0.27   | 0.22   | 0.23   | 0.24   | 0.26   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.27   | 0.28   | 0.28   | 0.28   | 0.28   | 0.28   | 0.28   | 0.28   | 0.28   | 0.2%  |
| Nuclear Power                     | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.2%  |
| Renewable Energy 17/              | 2.76   | 2.71   | 2.73   | 2.84   | 2.81   | 2.72   | 2.75   | 2.76   | 2.75   | 2.79   | 2.83   | 2.80   | 2.83   | 2.86   | 2.85   | 2.90   | 2.93   | 2.91   | 3.01   | 3.05   | 3.05   | 3.09   | 0.5%  |
| Methanol (M85) 11/                | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 14.2% |
| Liquid Hydrogen                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Electricity Imports 16/           | 0.03   | 0.04   | 0.04   | 0.05   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.03   | 0.03   | 0.02   | 0.03   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | -1.8% |
| Total                             | 11.39  | 11.83  | 11.97  | 12.23  | 12.40  | 12.47  | 12.65  | 12.89  | 13.05  | 13.31  | 13.53  | 13.71  | 13.92  | 14.13  | 14.30  | 14.55  | 14.76  | 14.88  | 15.11  | 15.26  | 15.39  | 15.54  | 1.4%  |
| Energy Use & Related Statistics   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Delivered Energy Use              | 9.18   | 9.46   | 9.60   | 9.75   | 9.90   | 10.09  | 10.26  | 10.46  | 10.63  | 10.82  | 10.98  | 11.17  | 11.32  | 11.48  | 11.65  | 11.83  | 12.01  | 12.16  | 12.29  | 12.44  | 12.57  | 12.71  | 1.5%  |
| Total Energy Use                  | 11.39  | 11.83  | 11.97  | 12.23  | 12.40  | 12.47  | 12.65  | 12.89  | 13.05  | 13.31  | 13.53  | 13.71  | 13.92  | 14.13  | 14.30  | 14.55  | 14.76  | 14.88  | 15.11  | 15.26  | 15.39  | 15.54  | 1.4%  |
| Population (millions)             | 43.51  | 44.50  | 44.93  | 45.36  | 45.80  | 46.26  | 46.74  | 47.24  | 47.75  | 48.27  | 48.81  | 49.36  | 49.92  | 50.49  | 51.07  | 51.65  | 52.23  | 52.81  | 53.37  | 53.92  | 54.45  | 54.97  | 1.1%  |
| US GDP (billion 1992 dollars)     | 7552   | 7991   | 8191   | 8377   | 8596   | 8824   | 9056   | 9251   | 9449   | 9651   | 9840   | 10054  | 10218  | 10416  | 10648  | 10906  | 11147  | 11331  | 11533  | 11741  | 11959  | 12179  | 2.2%  |
| Total Carbon Emis.(mill. m. tons) | 1485.4 | 1552.4 | 1575.6 | 1599.5 | 1628.5 | 1657.5 | 1683.4 | 1707.8 | 1730.6 | 1750.9 | 1767.1 | 1786.6 | 1802.6 | 1821.3 | 1842.3 | 1865.8 | 1893.4 | 1908.8 | 1927.8 | 1944.7 | 1961.6 | 1979.2 | 1.3%  |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 10. Energy Consumption by Sector and Source (1 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**United States Total**

1998 -

|                            | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Energy Consumption</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| <b>Residential</b>         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel            | 0.84  | 0.85  | 0.83  | 0.82  | 0.81  | 0.80  | 0.79  | 0.77  | 0.76  | 0.75  | 0.74  | 0.73  | 0.72  | 0.71  | 0.70  | 0.69  | 0.69  | 0.68  | 0.67  | 0.66  | 0.66  | 0.65  | -1.2% |
| Kerosene                   | 0.10  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | -0.9% |
| Liquefied Petroleum Gas    | 0.41  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.43  | 0.43  | 0.43  | 0.43  | 0.43  | 0.42  | 0.42  | 0.42  | 0.41  | 0.41  | 0.41  | 0.0%  |
| Petroleum Subtotal         | 1.36  | 1.37  | 1.36  | 1.35  | 1.34  | 1.33  | 1.31  | 1.30  | 1.29  | 1.28  | 1.26  | 1.25  | 1.24  | 1.23  | 1.22  | 1.21  | 1.19  | 1.19  | 1.17  | 1.16  | 1.15  | 1.15  | -0.8% |
| Natural Gas                | 4.61  | 5.04  | 5.07  | 5.11  | 5.14  | 5.20  | 5.22  | 5.26  | 5.31  | 5.37  | 5.40  | 5.46  | 5.49  | 5.54  | 5.57  | 5.61  | 5.65  | 5.70  | 5.72  | 5.76  | 5.81  | 5.86  | 1.1%  |
| Coal                       | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | -0.4% |
| Renewable Energy 1/        | 0.38  | 0.43  | 0.43  | 0.43  | 0.43  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45  | 0.8%  |
| Electricity                | 3.83  | 4.04  | 4.10  | 4.17  | 4.23  | 4.31  | 4.37  | 4.43  | 4.50  | 4.58  | 4.64  | 4.70  | 4.76  | 4.83  | 4.88  | 4.94  | 5.00  | 5.07  | 5.11  | 5.16  | 5.22  | 5.30  | 1.5%  |
| Delivered Energy           | 10.24 | 10.95 | 11.02 | 11.12 | 11.21 | 11.33 | 11.40 | 11.49 | 11.58 | 11.72 | 11.80 | 11.91 | 11.99 | 12.11 | 12.16 | 12.25 | 12.34 | 12.45 | 12.51 | 12.59 | 12.69 | 12.81 | 1.0%  |
| Electricity Related Losses | 8.53  | 8.94  | 9.07  | 9.21  | 9.32  | 9.36  | 9.42  | 9.50  | 9.56  | 9.66  | 9.73  | 9.76  | 9.80  | 9.86  | 9.87  | 9.91  | 9.96  | 9.98  | 10.02 | 10.05 | 10.10 | 10.18 | 0.8%  |
| Total                      | 18.77 | 19.89 | 20.09 | 20.33 | 20.53 | 20.69 | 20.82 | 20.99 | 21.14 | 21.38 | 21.53 | 21.66 | 21.79 | 21.96 | 22.03 | 22.16 | 22.30 | 22.44 | 22.52 | 22.64 | 22.78 | 22.99 | 0.9%  |
| <b>Commercial</b>          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel            | 0.38  | 0.37  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.37  | 0.37  | 0.37  | 0.37  | 0.36  | 0.36  | 0.36  | 0.36  | 0.36  | -0.2% |
| Residual Fuel              | 0.11  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | -0.2% |
| Kerosene                   | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | -0.1% |
| Liquefied Petroleum Gas    | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.9%  |
| Motor Gasoline 2/          | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | -0.3% |
| Petroleum Subtotal         | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.61  | 0.61  | 0.61  | 0.60  | -0.1% |
| Natural Gas                | 3.11  | 3.30  | 3.33  | 3.36  | 3.38  | 3.41  | 3.43  | 3.46  | 3.48  | 3.51  | 3.55  | 3.58  | 3.62  | 3.64  | 3.67  | 3.69  | 3.71  | 3.73  | 3.74  | 3.75  | 3.76  | 3.75  | 0.9%  |
| Coal                       | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.9%  |
| Renewable Energy 3/        | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.0%  |
| Electricity                | 3.56  | 3.74  | 3.81  | 3.88  | 3.93  | 3.99  | 4.06  | 4.11  | 4.17  | 4.24  | 4.31  | 4.36  | 4.42  | 4.48  | 4.52  | 4.56  | 4.58  | 4.61  | 4.63  | 4.65  | 4.67  | 4.68  | 1.2%  |
| Delivered Energy           | 7.46  | 7.81  | 7.93  | 8.02  | 8.10  | 8.19  | 8.28  | 8.36  | 8.45  | 8.55  | 8.65  | 8.74  | 8.84  | 8.92  | 8.99  | 9.05  | 9.10  | 9.14  | 9.17  | 9.19  | 9.21  | 9.22  | 1.0%  |
| Electricity Related Losses | 7.93  | 8.27  | 8.42  | 8.56  | 8.66  | 8.66  | 8.75  | 8.81  | 8.87  | 8.95  | 9.03  | 9.04  | 9.10  | 9.13  | 9.15  | 9.15  | 9.14  | 9.09  | 9.09  | 9.05  | 9.02  | 8.98  | 0.6%  |
| Total                      | 15.38 | 16.09 | 16.35 | 16.59 | 16.76 | 16.84 | 17.03 | 17.17 | 17.32 | 17.49 | 17.68 | 17.78 | 17.94 | 18.05 | 18.14 | 18.20 | 18.24 | 18.23 | 18.26 | 18.24 | 18.23 | 18.20 | 0.8%  |
| <b>Industrial 4/</b>       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Distillate Fuel            | 1.08  | 1.09  | 1.11  | 1.13  | 1.16  | 1.19  | 1.21  | 1.24  | 1.25  | 1.27  | 1.28  | 1.29  | 1.30  | 1.32  | 1.34  | 1.36  | 1.38  | 1.39  | 1.41  | 1.42  | 1.44  | 1.46  | 1.3%  |
| Liquefied Petroleum Gas    | 2.06  | 2.18  | 2.20  | 2.22  | 2.24  | 2.26  | 2.27  | 2.28  | 2.31  | 2.35  | 2.37  | 2.40  | 2.41  | 2.44  | 2.47  | 2.50  | 2.53  | 2.54  | 2.57  | 2.58  | 2.61  | 2.64  | 1.1%  |
| Petrochemical Feedstocks   | 1.39  | 1.30  | 1.33  | 1.35  | 1.40  | 1.44  | 1.47  | 1.51  | 1.53  | 1.55  | 1.56  | 1.58  | 1.59  | 1.61  | 1.63  | 1.65  | 1.66  | 1.67  | 1.69  | 1.70  | 1.72  | 1.73  | 1.0%  |
| Residual Fuel              | 0.27  | 0.23  | 0.24  | 0.24  | 0.25  | 0.25  | 0.25  | 0.26  | 0.26  | 0.28  | 0.28  | 0.29  | 0.28  | 0.29  | 0.29  | 0.29  | 0.30  | 0.30  | 0.30  | 0.30  | 0.31  | 0.31  | 0.7%  |
| Motor Gasoline 2/          | 0.21  | 0.21  | 0.22  | 0.22  | 0.22  | 0.23  | 0.23  | 0.23  | 0.24  | 0.24  | 0.24  | 0.25  | 0.25  | 0.25  | 0.25  | 0.26  | 0.26  | 0.27  | 0.27  | 0.27  | 0.28  | 0.28  | 1.4%  |
| Other Petroleum 5/         | 4.11  | 4.45  | 4.51  | 4.52  | 4.52  | 4.56  | 4.61  | 4.63  | 4.68  | 4.69  | 4.70  | 4.72  | 4.75  | 4.78  | 4.81  | 4.85  | 4.91  | 4.91  | 4.95  | 4.95  | 4.98  | 5.03  | 0.9%  |
| Petroleum Subtotal         | 9.12  | 9.47  | 9.60  | 9.68  | 9.78  | 9.92  | 10.05 | 10.16 | 10.28 | 10.37 | 10.44 | 10.53 | 10.59 | 10.69 | 10.79 | 10.91 | 11.04 | 11.08 | 11.18 | 11.23 | 11.33 | 11.45 | 1.0%  |
| Natural Gas 6/             | 9.75  | 9.61  | 9.61  | 9.73  | 9.97  | 10.16 | 10.36 | 10.56 | 10.67 | 10.77 | 10.84 | 10.96 | 11.02 | 11.13 | 11.26 | 11.39 | 11.53 | 11.60 | 11.70 | 11.80 | 11.90 | 11.99 | 0.9%  |
| Metallurgical Coal         | 0.76  | 0.73  | 0.72  | 0.71  | 0.70  | 0.69  | 0.68  | 0.67  | 0.66  | 0.65  | 0.64  | 0.63  | 0.62  | 0.61  | 0.60  | 0.59  | 0.58  | 0.57  | 0.56  | 0.55  | 0.54  | 0.53  | -1.6% |
| Steam Coal                 | 1.54  | 1.54  | 1.54  | 1.54  | 1.55  | 1.57  | 1.58  | 1.59  | 1.59  | 1.59  | 1.59  | 1.59  | 1.59  | 1.59  | 1.59  | 1.60  | 1.61  | 1.61  | 1.61  | 1.62  | 1.62  | 1.63  | 0.3%  |
| Net Coal Coke Imports      | 0.07  | 0.10  | 0.11  | 0.12  | 0.14  | 0.16  | 0.17  | 0.17  | 0.18  | 0.19  | 0.20  | 0.21  | 0.21  | 0.22  | 0.23  | 0.23  | 0.24  | 0.25  | 0.25  | 0.26  | 0.27  | 0.27  | 6.6%  |
| Coal Subtotal              | 2.36  | 2.37  | 2.37  | 2.38  | 2.40  | 2.42  | 2.43  | 2.43  | 2.44  | 2.43  | 2.42  | 2.42  | 2.41  | 2.41  | 2.42  | 2.42  | 2.42  | 2.42  | 2.42  | 2.42  | 2.43  | 2.43  | 0.1%  |
| Renewable Energy 7/        | 2.08  | 2.14  | 2.17  | 2.20  | 2.24  | 2.27  | 2.30  | 2.32  | 2.34  | 2.36  | 2.38  | 2.40  | 2.42  | 2.44  | 2.46  | 2.50  | 2.53  | 2.54  | 2.56  | 2.58  | 2.61  | 2.63  | 1.1%  |
| Electricity                | 3.57  | 3.61  | 3.62  | 3.69  | 3.78  | 3.84  | 3.92  | 3.97  | 4.03  | 4.08  | 4.11  | 4.15  | 4.19  | 4.24  | 4.31  | 4.38  | 4.45  | 4.48  | 4.53  | 4.58  | 4.64  | 4.70  | 1.3%  |
| Delivered Energy           | 26.89 | 27.20 | 27.37 | 27.68 | 28.16 | 28.60 | 29.06 | 29.44 | 29.76 | 30.02 | 30.19 | 30.46 | 30.63 | 30.92 | 31.24 | 31.60 | 31.96 | 32.14 | 32.39 | 32.61 | 32.90 | 33.20 | 1.0%  |
| Electricity Related Losses | 7.95  | 7.99  | 8.01  | 8.14  | 8.31  | 8.34  | 8.45  | 8.51  | 8.57  | 8.61  | 8.61  | 8.61  | 8.62  | 8.65  | 8.72  | 8.78  | 8.87  | 8.84  | 8.90  | 8.93  | 8.97  | 9.03  | 0.6%  |
| Total                      | 34.84 | 35.19 | 35.38 | 35.82 | 36.47 | 36.94 | 37.51 | 37.95 | 38.33 | 38.63 | 38.80 | 39.08 | 39.25 | 39.57 | 39.96 | 40.39 | 40.83 | 40.97 | 41.29 | 41.54 | 41.88 | 42.23 | 0.9%  |

**Table 10. Energy Consumption by Sector and Source (2 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**United States Total**

1998-

|  | 1998  | 2000  | 2001  | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|--|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Transportation                           |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Distillate Fuel                          | 4.95  | 5.12  | 5.19  | 5.28   | 5.37   | 5.45   | 5.53   | 5.59   | 5.64   | 5.68   | 5.71   | 5.76   | 5.79   | 5.83   | 5.89   | 5.95   | 6.02   | 6.05   | 6.10   | 6.14   | 6.18   | 6.22   | 1.0%  |
| Jet Fuel 8/                              | 3.36  | 3.56  | 3.65  | 3.76   | 3.89   | 4.04   | 4.16   | 4.32   | 4.44   | 4.58   | 4.70   | 4.85   | 4.96   | 5.10   | 5.23   | 5.40   | 5.55   | 5.69   | 5.82   | 5.97   | 6.11   | 6.24   | 2.9%  |
| Motor Gasoline 2/                        | 15.59 | 16.18 | 16.52 | 16.83  | 17.07  | 17.40  | 17.69  | 18.00  | 18.30  | 18.57  | 18.85  | 19.12  | 19.34  | 19.55  | 19.78  | 20.05  | 20.30  | 20.50  | 20.70  | 20.91  | 21.12  | 21.35  | 1.4%  |
| Residual Fuel                            | 0.65  | 0.69  | 0.71  | 0.73   | 0.75   | 0.77   | 0.80   | 0.82   | 0.85   | 0.87   | 0.90   | 0.92   | 0.95   | 0.97   | 1.00   | 1.02   | 1.05   | 1.07   | 1.10   | 1.12   | 1.15   | 1.18   | 2.7%  |
| Liquefied Petroleum Gas                  | 0.05  | 0.05  | 0.06  | 0.07   | 0.07   | 0.08   | 0.09   | 0.09   | 0.10   | 0.10   | 0.10   | 0.11   | 0.11   | 0.11   | 0.12   | 0.12   | 0.12   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 5.0%  |
| Other Petroleum 9/                       | 0.30  | 0.31  | 0.31  | 0.32   | 0.32   | 0.32   | 0.33   | 0.33   | 0.33   | 0.34   | 0.34   | 0.34   | 0.34   | 0.34   | 0.35   | 0.35   | 0.36   | 0.36   | 0.36   | 0.36   | 0.37   | 0.37   | 0.9%  |
| Petroleum Subtotal                       | 24.89 | 25.91 | 26.45 | 26.98  | 27.47  | 28.06  | 28.59  | 29.14  | 29.65  | 30.14  | 30.60  | 31.10  | 31.49  | 31.91  | 32.37  | 32.90  | 33.39  | 33.81  | 34.20  | 34.64  | 35.05  | 35.49  | 1.6%  |
| Pipeline Fuel Natural Gas                | 0.75  | 0.77  | 0.75  | 0.75   | 0.75   | 0.75   | 0.77   | 0.79   | 0.81   | 0.83   | 0.84   | 0.87   | 0.88   | 0.90   | 0.91   | 0.93   | 0.95   | 0.96   | 0.97   | 0.98   | 0.98   | 0.99   | 1.3%  |
| Compressed Natural Gas                   | 0.02  | 0.05  | 0.08  | 0.10   | 0.12   | 0.14   | 0.16   | 0.17   | 0.19   | 0.20   | 0.22   | 0.23   | 0.24   | 0.25   | 0.27   | 0.28   | 0.29   | 0.30   | 0.31   | 0.31   | 0.32   | 0.33   | 13.0% |
| Renewables (E85) 10/                     | 0.00  | 0.01  | 0.01  | 0.02   | 0.02   | 0.03   | 0.03   | 0.04   | 0.04   | 0.05   | 0.05   | 0.06   | 0.06   | 0.06   | 0.07   | 0.07   | 0.07   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 16.3% |
| Methanol (M85) 11/                       | 0.01  | 0.02  | 0.03  | 0.04   | 0.05   | 0.06   | 0.06   | 0.07   | 0.08   | 0.09   | 0.09   | 0.10   | 0.11   | 0.11   | 0.12   | 0.13   | 0.13   | 0.14   | 0.14   | 0.15   | 0.15   | 0.15   | 14.3% |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Electricity                              | 0.07  | 0.07  | 0.07  | 0.07   | 0.08   | 0.09   | 0.10   | 0.10   | 0.11   | 0.11   | 0.12   | 0.12   | 0.13   | 0.13   | 0.14   | 0.14   | 0.15   | 0.15   | 0.16   | 0.16   | 0.16   | 0.17   | 4.2%  |
| Delivered Energy                         | 25.74 | 26.83 | 27.38 | 27.96  | 28.49  | 29.12  | 29.71  | 30.31  | 30.88  | 31.42  | 31.92  | 32.48  | 32.92  | 33.37  | 33.87  | 34.45  | 34.99  | 35.43  | 35.86  | 36.32  | 36.75  | 37.20  | 1.7%  |
| Electricity Related Losses               | 0.15  | 0.16  | 0.16  | 0.16   | 0.18   | 0.19   | 0.21   | 0.22   | 0.23   | 0.24   | 0.25   | 0.26   | 0.27   | 0.27   | 0.28   | 0.29   | 0.30   | 0.30   | 0.31   | 0.31   | 0.32   | 0.32   | 3.5%  |
| Total                                    | 25.89 | 26.99 | 27.54 | 28.12  | 28.67  | 29.32  | 29.92  | 30.53  | 31.11  | 31.66  | 32.17  | 32.74  | 33.18  | 33.65  | 34.15  | 34.74  | 35.28  | 35.73  | 36.17  | 36.63  | 37.07  | 37.53  | 1.7%  |
| Delivered Energy Consumption All Sectors |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Distillate Fuel                          | 7.25  | 7.43  | 7.51  | 7.61   | 7.71   | 7.82   | 7.91   | 7.98   | 8.03   | 8.08   | 8.10   | 8.16   | 8.19   | 8.24   | 8.30   | 8.38   | 8.45   | 8.49   | 8.54   | 8.58   | 8.63   | 8.68   | 0.8%  |
| Kerosene                                 | 0.16  | 0.14  | 0.14  | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | 0.14   | -0.7% |
| Jet Fuel 8/                              | 3.36  | 3.56  | 3.65  | 3.76   | 3.89   | 4.04   | 4.16   | 4.32   | 4.44   | 4.58   | 4.70   | 4.85   | 4.96   | 5.10   | 5.23   | 5.40   | 5.55   | 5.69   | 5.82   | 5.97   | 6.11   | 6.24   | 2.9%  |
| Liquefied Petroleum Gas                  | 2.59  | 2.74  | 2.78  | 2.80   | 2.84   | 2.86   | 2.88   | 2.89   | 2.93   | 2.97   | 2.99   | 3.03   | 3.04   | 3.07   | 3.10   | 3.13   | 3.16   | 3.18   | 3.20   | 3.22   | 3.24   | 3.27   | 1.1%  |
| Motor Gasoline 2/                        | 15.82 | 16.42 | 16.77 | 17.08  | 17.32  | 17.65  | 17.95  | 18.26  | 18.57  | 18.84  | 19.12  | 19.39  | 19.62  | 19.83  | 20.07  | 20.33  | 20.59  | 20.79  | 20.99  | 21.21  | 21.42  | 21.65  | 1.4%  |
| Petrochemical Feedstocks                 | 1.39  | 1.30  | 1.33  | 1.35   | 1.40   | 1.44   | 1.47   | 1.51   | 1.53   | 1.55   | 1.56   | 1.58   | 1.59   | 1.61   | 1.63   | 1.65   | 1.66   | 1.67   | 1.69   | 1.70   | 1.72   | 1.73   | 1.0%  |
| Residual Fuel                            | 1.02  | 1.02  | 1.05  | 1.07   | 1.09   | 1.12   | 1.15   | 1.19   | 1.21   | 1.26   | 1.29   | 1.31   | 1.34   | 1.36   | 1.39   | 1.42   | 1.45   | 1.48   | 1.50   | 1.53   | 1.56   | 1.59   | 2.0%  |
| Other Petroleum 12/                      | 4.39  | 4.74  | 4.80  | 4.81   | 4.81   | 4.86   | 4.91   | 4.94   | 4.99   | 5.00   | 5.01   | 5.04   | 5.07   | 5.10   | 5.13   | 5.18   | 5.24   | 5.25   | 5.29   | 5.29   | 5.33   | 5.38   | 0.9%  |
| Petroleum Subtotal                       | 35.98 | 37.35 | 38.02 | 38.63  | 39.20  | 39.92  | 40.57  | 41.22  | 41.84  | 42.42  | 42.92  | 43.50  | 43.94  | 44.45  | 45.00  | 45.64  | 46.24  | 46.69  | 47.17  | 47.64  | 48.14  | 48.69  | 1.4%  |
| Natural Gas 6/                           | 18.24 | 18.77 | 18.83 | 19.04  | 19.37  | 19.66  | 19.94  | 20.24  | 20.46  | 20.68  | 20.85  | 21.09  | 21.25  | 21.46  | 21.67  | 21.90  | 22.13  | 22.29  | 22.44  | 22.60  | 22.76  | 22.92  | 1.0%  |
| Metallurgical Coal                       | 0.76  | 0.73  | 0.72  | 0.71   | 0.70   | 0.69   | 0.68   | 0.67   | 0.66   | 0.65   | 0.64   | 0.63   | 0.62   | 0.61   | 0.60   | 0.59   | 0.58   | 0.57   | 0.56   | 0.55   | 0.54   | 0.53   | -1.6% |
| Steam Coal                               | 1.68  | 1.69  | 1.69  | 1.70   | 1.71   | 1.72   | 1.73   | 1.74   | 1.74   | 1.74   | 1.74   | 1.75   | 1.74   | 1.75   | 1.75   | 1.76   | 1.77   | 1.77   | 1.77   | 1.77   | 1.78   | 1.79   | 0.3%  |
| Net Coal Coke Imports                    | 0.07  | 0.10  | 0.11  | 0.12   | 0.14   | 0.16   | 0.17   | 0.17   | 0.18   | 0.19   | 0.20   | 0.21   | 0.21   | 0.22   | 0.23   | 0.23   | 0.24   | 0.25   | 0.25   | 0.26   | 0.27   | 0.27   | 6.6%  |
| Coal Subtotal                            | 2.50  | 2.53  | 2.53  | 2.53   | 2.55   | 2.57   | 2.59   | 2.59   | 2.59   | 2.59   | 2.58   | 2.58   | 2.57   | 2.57   | 2.57   | 2.58   | 2.58   | 2.58   | 2.58   | 2.58   | 2.58   | 2.58   | 0.2%  |
| Renewable Energy 13/                     | 2.55  | 2.66  | 2.69  | 2.73   | 2.77   | 2.81   | 2.84   | 2.87   | 2.90   | 2.93   | 2.95   | 2.98   | 3.00   | 3.03   | 3.05   | 3.09   | 3.12   | 3.15   | 3.17   | 3.19   | 3.22   | 3.24   | 1.1%  |
| Methanol (M85) 11/                       | 0.01  | 0.02  | 0.03  | 0.04   | 0.05   | 0.06   | 0.06   | 0.07   | 0.08   | 0.09   | 0.09   | 0.10   | 0.11   | 0.11   | 0.12   | 0.13   | 0.13   | 0.14   | 0.14   | 0.15   | 0.15   | 0.15   | 14.3% |
| Liquid Hydrogen                          | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Electricity                              | 11.04 | 11.47 | 11.61 | 11.81  | 12.02  | 12.23  | 12.44  | 12.62  | 12.81  | 13.01  | 13.17  | 13.34  | 13.50  | 13.69  | 13.85  | 14.02  | 14.18  | 14.32  | 14.43  | 14.55  | 14.69  | 14.84  | 1.4%  |
| Delivered Energy                         | 70.32 | 72.79 | 73.71 | 74.78  | 75.96  | 77.24  | 78.46  | 79.61  | 80.68  | 81.71  | 82.56  | 83.59  | 84.38  | 85.32  | 86.27  | 87.35  | 88.38  | 89.16  | 89.93  | 90.71  | 91.55  | 92.44  | 1.3%  |
| Electricity Related Losses               | 24.56 | 25.36 | 25.66 | 26.08  | 26.47  | 26.55  | 26.82  | 27.03  | 27.23  | 27.46  | 27.62  | 27.67  | 27.78  | 27.92  | 28.02  | 28.13  | 28.27  | 28.22  | 28.31  | 28.34  | 28.41  | 28.51  | 0.7%  |
| Total                                    | 94.88 | 98.15 | 99.37 | 100.86 | 102.44 | 103.79 | 105.28 | 106.64 | 107.90 | 109.17 | 110.18 | 111.26 | 112.16 | 113.23 | 114.29 | 115.48 | 116.66 | 117.38 | 118.24 | 119.05 | 119.96 | 120.95 | 1.1%  |
| Electric Generators 14/                  |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Distillate Fuel                          | 0.08  | 0.06  | 0.05  | 0.05   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.03   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.05   | 0.04   | 0.04   | 0.05   | 0.05   | 0.05   | -2.4% |
| Residual Fuel                            | 1.15  | 0.82  | 0.83  | 0.72   | 0.66   | 0.63   | 0.60   | 0.62   | 0.58   | 0.54   | 0.48   | 0.45   | 0.38   | 0.36   | 0.35   | 0.35   | 0.36   | 0.34   | 0.33   | 0.32   | 0.32   | 0.32   | -5.6% |
| Petroleum Subtotal                       | 1.23  | 0.88  | 0.88  | 0.77   | 0.71   | 0.67   | 0.64   | 0.66   | 0.62   | 0.57   | 0.52   | 0.48   | 0.41   | 0.40   | 0.39   | 0.39   | 0.41   | 0.39   | 0.37   | 0.37   | 0.37   | 0.37   | -5.3% |
| Natural Gas                              | 3.75  | 4.21  | 3.97  | 4.00   | 4.19   | 4.26   | 4.62   | 4.97   | 5.48   | 5.86   | 6.09   | 6.60   | 6.96   | 7.27   | 7.61   | 8.02   | 8.55   | 8.77   | 9.05   | 9.26   | 9.37   | 9.46   | 4.3%  |
| Steam Coal                               | 19.00 | 19.94 | 20.51 | 20.96  | 21.48  | 21.94  | 22.13  | 22.26  | 22.36  | 22.45  | 22.57  | 22.54  | 22.63  | 22.73  | 22.89  | 23.02  | 23.26  | 23.34  | 23.53  | 23.65  | 23.83  | 24.01  | 1.1%  |
| Nuclear Power                            | 7.19  | 7.35  | 7.37  | 7.38   | 7.37   | 7.27   | 7.20   | 7.01   | 6.88   | 6.86   | 6.87   | 6.70   | 6.53   | 6.46   | 6.26   | 5.97   | 5.45   | 5.23   | 4.89   | 4.67   | 4.58   | 4.56   | -2.1% |
| Renewable Energy 15/                     | 4.12  | 4.02  | 4.13  | 4.26   | 4.25   | 4.18   | 4.23   | 4.29   | 4.30   | 4.36   | 4.43   | 4.43   | 4.48   | 4.53   | 4.51   | 4.56   | 4.59   | 4.58   | 4.69   | 4.71   | 4.72   | 4.75   | 0.6%  |
| Electricity Imports 16/                  | 0.31  | 0.42  | 0.41  | 0.52   | 0.51   | 0.47   | 0.44   | 0.47   | 0.40   | 0.35   | 0.32   | 0.26   | 0.27   | 0.22   | 0.21   | 0.19   | 0.19   | 0.21   | 0.21   | 0.23   | 0.23   | 0.21   | -1.8% |
| Total                                    | 35.60 | 36.82 | 37.27 | 37.89  | 38.50  | 38.78  | 39.27  | 39.65  | 40.03  | 40.46  | 40.79  | 41.00  | 41.29  | 41.61  | 41.87  | 42.15  | 42.45  | 42.53  | 42.74  | 42.89  | 43.10  | 43.35  | 0.9%  |

**Table 10. Energy Consumption by Sector and Source (3 of 3)**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**  
**United States Total**

1998 -

|  | 1998         | 2000         | 2001         | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 2020        |
|--|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| <b>Total Energy Consumption</b>            |              |              |              |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Distillate Fuel                            | 7.32         | 7.49         | 7.56         | 7.66          | 7.76          | 7.86          | 7.95          | 8.01          | 8.07          | 8.12          | 8.13          | 8.19          | 8.22          | 8.27          | 8.34          | 8.42          | 8.50          | 8.53          | 8.58          | 8.63          | 8.68          | 8.73          | 0.8%        |
| Kerosene                                   | 0.16         | 0.14         | 0.14         | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | 0.14          | -0.7%       |
| Jet Fuel 8/                                | 3.36         | 3.56         | 3.65         | 3.76          | 3.89          | 4.04          | 4.16          | 4.32          | 4.44          | 4.58          | 4.70          | 4.85          | 4.96          | 5.10          | 5.23          | 5.40          | 5.55          | 5.69          | 5.82          | 5.97          | 6.11          | 6.24          | 2.9%        |
| Liquefied Petroleum Gas                    | 2.59         | 2.74         | 2.78         | 2.80          | 2.84          | 2.86          | 2.88          | 2.89          | 2.93          | 2.97          | 2.99          | 3.03          | 3.04          | 3.07          | 3.10          | 3.13          | 3.16          | 3.18          | 3.20          | 3.22          | 3.24          | 3.27          | 1.1%        |
| Motor Gasoline 2/                          | 15.82        | 16.42        | 16.77        | 17.08         | 17.32         | 17.65         | 17.95         | 18.26         | 18.57         | 18.84         | 19.12         | 19.39         | 19.62         | 19.83         | 20.07         | 20.33         | 20.59         | 20.79         | 20.99         | 21.21         | 21.42         | 21.65         | 1.4%        |
| Petrochemical Feedstocks                   | 1.39         | 1.30         | 1.33         | 1.35          | 1.40          | 1.44          | 1.47          | 1.51          | 1.53          | 1.55          | 1.56          | 1.58          | 1.59          | 1.61          | 1.63          | 1.65          | 1.66          | 1.67          | 1.69          | 1.70          | 1.72          | 1.73          | 1.0%        |
| Residual Fuel                              | 2.17         | 1.84         | 1.88         | 1.79          | 1.75          | 1.75          | 1.75          | 1.81          | 1.79          | 1.79          | 1.77          | 1.76          | 1.71          | 1.73          | 1.75          | 1.77          | 1.81          | 1.82          | 1.83          | 1.85          | 1.88          | 1.91          | -0.6%       |
| Other Petroleum 12/                        | 4.39         | 4.74         | 4.80         | 4.81          | 4.81          | 4.86          | 4.91          | 4.94          | 4.99          | 5.00          | 5.01          | 5.04          | 5.07          | 5.10          | 5.13          | 5.18          | 5.24          | 5.25          | 5.29          | 5.29          | 5.33          | 5.38          | 0.9%        |
| Petroleum Subtotal                         | 37.21        | 38.23        | 38.90        | 39.39         | 39.91         | 40.59         | 41.21         | 41.87         | 42.46         | 42.99         | 43.43         | 43.98         | 44.35         | 44.85         | 45.39         | 46.03         | 46.65         | 47.08         | 47.54         | 48.01         | 48.51         | 49.05         | 1.3%        |
| Natural Gas                                | 21.99        | 22.98        | 22.80        | 23.04         | 23.56         | 23.92         | 24.57         | 25.21         | 25.94         | 26.54         | 26.93         | 27.69         | 28.22         | 28.73         | 29.28         | 29.92         | 30.68         | 31.06         | 31.49         | 31.86         | 32.14         | 32.38         | 1.8%        |
| Metallurgical Coal                         | 0.76         | 0.73         | 0.72         | 0.71          | 0.70          | 0.69          | 0.68          | 0.67          | 0.66          | 0.65          | 0.64          | 0.63          | 0.62          | 0.61          | 0.60          | 0.59          | 0.58          | 0.57          | 0.56          | 0.55          | 0.54          | 0.53          | -1.6%       |
| Steam Coal                                 | 20.68        | 21.64        | 22.20        | 22.65         | 23.18         | 23.66         | 23.86         | 24.00         | 24.10         | 24.20         | 24.31         | 24.28         | 24.37         | 24.48         | 24.64         | 24.78         | 25.02         | 25.11         | 25.30         | 25.43         | 25.61         | 25.80         | 1.0%        |
| Net Coal Coke Imports                      | 0.07         | 0.10         | 0.11         | 0.12          | 0.14          | 0.16          | 0.17          | 0.17          | 0.18          | 0.19          | 0.20          | 0.21          | 0.21          | 0.22          | 0.23          | 0.23          | 0.24          | 0.25          | 0.25          | 0.26          | 0.27          | 0.27          | 6.6%        |
| Coal Subtotal                              | 21.50        | 22.47        | 23.03        | 23.49         | 24.03         | 24.51         | 24.72         | 24.85         | 24.95         | 25.04         | 25.15         | 25.12         | 25.20         | 25.31         | 25.47         | 25.60         | 25.84         | 25.92         | 26.11         | 26.23         | 26.41         | 26.60         | 1.0%        |
| Nuclear Power                              | 7.19         | 7.35         | 7.37         | 7.38          | 7.37          | 7.27          | 7.20          | 7.01          | 6.88          | 6.86          | 6.87          | 6.70          | 6.53          | 6.46          | 6.26          | 5.97          | 5.45          | 5.23          | 4.89          | 4.67          | 4.58          | 4.56          | -2.1%       |
| Renewable Energy 17/                       | 6.67         | 6.68         | 6.82         | 6.99          | 7.02          | 6.99          | 7.08          | 7.16          | 7.20          | 7.29          | 7.38          | 7.41          | 7.48          | 7.56          | 7.57          | 7.65          | 7.71          | 7.73          | 7.86          | 7.90          | 7.94          | 7.99          | 0.8%        |
| Methanol (M85) 11/                         | 0.01         | 0.02         | 0.03         | 0.04          | 0.05          | 0.06          | 0.06          | 0.07          | 0.08          | 0.09          | 0.09          | 0.10          | 0.11          | 0.11          | 0.12          | 0.13          | 0.13          | 0.14          | 0.14          | 0.15          | 0.15          | 0.15          | 14.3%       |
| Liquid Hydrogen                            | 0.00         | 0.00         | 0.00         | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Electricity Imports 16/                    | 0.31         | 0.42         | 0.41         | 0.52          | 0.51          | 0.47          | 0.44          | 0.47          | 0.40          | 0.35          | 0.32          | 0.26          | 0.27          | 0.22          | 0.21          | 0.19          | 0.19          | 0.21          | 0.21          | 0.23          | 0.23          | 0.21          | -1.8%       |
| <b>Total</b>                               | <b>94.88</b> | <b>98.15</b> | <b>99.37</b> | <b>100.86</b> | <b>102.44</b> | <b>103.79</b> | <b>105.28</b> | <b>106.64</b> | <b>107.90</b> | <b>109.17</b> | <b>110.18</b> | <b>111.26</b> | <b>112.16</b> | <b>113.23</b> | <b>114.29</b> | <b>115.48</b> | <b>116.66</b> | <b>117.38</b> | <b>118.24</b> | <b>119.05</b> | <b>119.96</b> | <b>120.95</b> | <b>1.1%</b> |
| <b>Energy Use &amp; Related Statistics</b> |              |              |              |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Delivered Energy Use                       | 70.32        | 72.79        | 73.71        | 74.78         | 75.96         | 77.24         | 78.46         | 79.61         | 80.68         | 81.71         | 82.56         | 83.59         | 84.38         | 85.32         | 86.27         | 87.35         | 88.38         | 89.16         | 89.93         | 90.71         | 91.55         | 92.44         | 1.3%        |
| Total Energy Use                           | 94.88        | 98.15        | 99.37        | 100.86        | 102.44        | 103.79        | 105.28        | 106.64        | 107.90        | 109.17        | 110.18        | 111.26        | 112.16        | 113.23        | 114.29        | 115.48        | 116.66        | 117.38        | 118.24        | 119.05        | 119.96        | 120.95        | 1.1%        |
| Population (millions)                      | 270.58       | 275.21       | 277.50       | 279.77        | 282.04        | 284.30        | 286.57        | 288.87        | 291.19        | 293.54        | 295.92        | 298.34        | 300.79        | 303.26        | 305.75        | 308.26        | 310.78        | 313.31        | 315.84        | 318.37        | 320.89        | 323.40        | 0.8%        |
| US GDP (billion 1992 dollars)              | 7552         | 7991         | 8191         | 8377          | 8596          | 8824          | 9056          | 9251          | 9449          | 9651          | 9840          | 10054         | 10218         | 10416         | 10648         | 10906         | 11147         | 11331         | 11533         | 11741         | 11959         | 12179         | 2.2%        |
| Total Carbon Emis.(mill. m. tons)          | 1485.4       | 1552.4       | 1575.6       | 1599.5        | 1628.5        | 1657.5        | 1683.4        | 1707.8        | 1730.6        | 1750.9        | 1767.1        | 1786.6        | 1802.6        | 1821.3        | 1842.3        | 1865.8        | 1893.4        | 1908.8        | 1927.8        | 1944.7        | 1961.6        | 1979.2        | 1.3%        |

1/ Includes wood used for residential heating.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass.

4/ Fuel consumption includes consumption for cogeneration.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Includes lease and plant fuel and consumption by cogenerators, excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Includes naphtha and kerosene type.

9/ Includes aviation gas and lubricants.

10/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

11/ M85 is 85 percent methanol and 15 percent motor gasoline.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers & exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

16/ In 1998 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions for the fuel source of imported electricity.

17/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10

percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

Emis. = Emissions.

Mill. m. tons = Million metric tons.

N/A = Not applicable.

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Consumption values

of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1998 electric utility fuel consumption: Energy Information Administration (EIA), Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867,

"Annual Nonutility Power Producer Report, 1997." Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.pdf> (October 12, 1999).

Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 11. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**01 - New England**

|                         | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Residential             | 13.65 | 14.18 | 14.13 | 14.05 | 14.21 | 14.16 | 14.06 | 14.24 | 14.21 | 14.17 | 14.12 | 14.17 | 14.10 | 14.15 | 14.20 | 14.18 | 14.21 | 14.24 | 14.27 | 14.30 | 14.33 | 14.35 | 0.2%      |
| Primary Energy 1/       | 7.59  | 8.58  | 8.47  | 8.45  | 8.46  | 8.47  | 8.48  | 8.50  | 8.51  | 8.51  | 8.53  | 8.50  | 8.47  | 8.47  | 8.45  | 8.43  | 8.43  | 8.40  | 8.37  | 8.36  | 8.35  | 8.35  | 0.4%      |
| Petroleum Products 2/   | 6.66  | 8.21  | 8.09  | 8.08  | 8.13  | 8.15  | 8.17  | 8.21  | 8.24  | 8.29  | 8.37  | 8.37  | 8.38  | 8.42  | 8.43  | 8.45  | 8.49  | 8.50  | 8.48  | 8.50  | 8.51  | 8.53  | 1.1%      |
| Distillate Fuel         | 5.93  | 7.39  | 7.28  | 7.27  | 7.32  | 7.34  | 7.36  | 7.40  | 7.43  | 7.48  | 7.57  | 7.57  | 7.57  | 7.62  | 7.64  | 7.68  | 7.71  | 7.72  | 7.71  | 7.72  | 7.73  | 7.75  | 1.2%      |
| Liquefied Petroleum Gas | 14.43 | 16.59 | 16.39 | 16.37 | 16.35 | 16.41 | 16.34 | 16.35 | 16.36 | 16.39 | 16.43 | 16.41 | 16.41 | 16.41 | 16.31 | 16.18 | 16.32 | 16.20 | 16.23 | 16.25 | 16.27 | 16.35 | 0.6%      |
| Natural Gas             | 9.20  | 9.20  | 9.11  | 9.05  | 8.98  | 8.97  | 8.97  | 8.95  | 8.92  | 8.85  | 8.77  | 8.71  | 8.63  | 8.57  | 8.50  | 8.43  | 8.38  | 8.32  | 8.28  | 8.24  | 8.21  | 8.20  | -0.5%     |
| Electricity             | 33.19 | 32.17 | 32.11 | 31.58 | 32.04 | 31.51 | 30.76 | 31.30 | 30.88 | 30.47 | 29.93 | 30.07 | 29.70 | 29.79 | 29.92 | 29.75 | 29.72 | 29.79 | 29.89 | 29.95 | 29.95 | 29.93 | -0.5%     |
| Commercial              | 14.64 | 14.49 | 14.42 | 14.23 | 14.47 | 14.29 | 13.99 | 14.10 | 13.77 | 13.43 | 13.13 | 13.04 | 12.79 | 12.75 | 12.74 | 12.61 | 12.57 | 12.57 | 12.58 | 12.61 | 12.64 | 12.68 | -0.7%     |
| Primary Energy 1/       | 5.90  | 6.62  | 6.53  | 6.51  | 6.51  | 6.53  | 6.55  | 6.58  | 6.59  | 6.58  | 6.58  | 6.56  | 6.53  | 6.52  | 6.50  | 6.48  | 6.48  | 6.47  | 6.46  | 6.45  | 6.46  | 6.48  | 0.4%      |
| Petroleum Products 2/   | 4.37  | 5.88  | 5.74  | 5.73  | 5.77  | 5.78  | 5.78  | 5.81  | 5.83  | 5.86  | 5.92  | 5.91  | 5.91  | 5.94  | 5.95  | 5.97  | 6.00  | 6.00  | 6.00  | 6.01  | 6.02  | 6.03  | 1.5%      |
| Distillate Fuel         | 4.30  | 5.75  | 5.63  | 5.62  | 5.68  | 5.70  | 5.72  | 5.76  | 5.79  | 5.84  | 5.93  | 5.93  | 5.93  | 5.98  | 6.00  | 6.04  | 6.07  | 6.08  | 6.07  | 6.08  | 6.09  | 6.10  | 1.6%      |
| Residual Fuel           | 2.37  | 3.40  | 3.27  | 3.26  | 3.28  | 3.28  | 3.26  | 3.27  | 3.26  | 3.25  | 3.25  | 3.24  | 3.24  | 3.25  | 3.26  | 3.27  | 3.29  | 3.30  | 3.32  | 3.34  | 3.36  | 3.37  | 1.6%      |
| Natural Gas 3/          | 6.88  | 7.08  | 7.01  | 6.99  | 6.96  | 6.99  | 7.02  | 7.04  | 7.04  | 7.02  | 6.97  | 6.93  | 6.89  | 6.85  | 6.81  | 6.77  | 6.75  | 6.73  | 6.71  | 6.69  | 6.69  | 6.71  | -0.1%     |
| Electricity             | 28.96 | 27.38 | 27.36 | 26.81 | 27.46 | 26.84 | 25.89 | 26.12 | 25.12 | 24.15 | 23.29 | 23.04 | 22.38 | 22.26 | 22.23 | 21.88 | 21.76 | 21.77 | 21.80 | 21.86 | 21.90 | 21.95 | -1.3%     |
| Industrial 4/           | 7.66  | 8.14  | 8.01  | 7.89  | 7.99  | 7.87  | 7.72  | 7.79  | 7.64  | 7.49  | 7.33  | 7.29  | 7.11  | 7.10  | 7.11  | 7.07  | 7.07  | 7.08  | 7.12  | 7.14  | 7.18  | 7.24  | -0.3%     |
| Primary Energy          | 3.46  | 4.25  | 4.17  | 4.18  | 4.23  | 4.27  | 4.31  | 4.35  | 4.37  | 4.39  | 4.39  | 4.39  | 4.32  | 4.34  | 4.35  | 4.37  | 4.40  | 4.40  | 4.40  | 4.42  | 4.44  | 4.47  | 1.2%      |
| Petroleum Products 2/   | 3.47  | 4.83  | 4.66  | 4.65  | 4.71  | 4.73  | 4.73  | 4.75  | 4.76  | 4.78  | 4.81  | 4.81  | 4.69  | 4.74  | 4.77  | 4.81  | 4.86  | 4.86  | 4.87  | 4.88  | 4.91  | 4.94  | 1.6%      |
| Distillate Fuel         | 4.67  | 5.83  | 5.72  | 5.71  | 5.76  | 5.78  | 5.80  | 5.84  | 5.87  | 5.92  | 6.01  | 6.01  | 6.02  | 6.06  | 6.08  | 6.12  | 6.15  | 6.15  | 6.16  | 6.16  | 6.17  | 6.19  | 1.3%      |
| Liquefied Petroleum Gas | 10.52 | 11.65 | 11.45 | 11.43 | 11.41 | 11.47 | 11.40 | 11.42 | 11.42 | 11.46 | 11.49 | 11.47 | 11.48 | 11.47 | 11.37 | 11.25 | 11.39 | 11.27 | 11.29 | 11.31 | 11.33 | 11.41 | 0.4%      |
| Residual Fuel           | 2.36  | 3.38  | 3.24  | 3.24  | 3.26  | 3.25  | 3.24  | 3.24  | 3.23  | 3.23  | 3.23  | 3.21  | 3.21  | 3.22  | 3.24  | 3.24  | 3.26  | 3.28  | 3.29  | 3.31  | 3.33  | 3.34  | 1.6%      |
| Natural Gas 5/          | 3.50  | 3.71  | 3.69  | 3.73  | 3.77  | 3.84  | 3.93  | 3.99  | 4.03  | 4.04  | 4.03  | 4.03  | 4.00  | 4.00  | 3.99  | 3.98  | 3.98  | 3.98  | 3.99  | 4.00  | 4.02  | 4.06  | 0.7%      |
| Metallurgical Coal      | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |
| Steam Coal              | 2.35  | 2.31  | 2.29  | 2.28  | 2.25  | 2.24  | 2.22  | 2.21  | 2.18  | 2.17  | 2.15  | 2.13  | 2.11  | 2.09  | 2.07  | 2.05  | 2.03  | 2.00  | 1.98  | 1.96  | 1.94  | 1.92  | -0.9%     |
| Electricity             | 21.86 | 20.86 | 20.79 | 20.22 | 20.56 | 19.95 | 19.18 | 19.42 | 18.66 | 17.91 | 17.19 | 17.01 | 16.42 | 16.30 | 16.28 | 16.06 | 16.00 | 16.02 | 16.12 | 16.18 | 16.27 | 16.41 | -1.3%     |
| Transportation          | 8.55  | 10.34 | 10.05 | 10.01 | 10.06 | 10.09 | 10.08 | 10.07 | 10.12 | 10.14 | 10.13 | 10.12 | 10.12 | 10.13 | 10.11 | 10.10 | 10.10 | 10.07 | 10.06 | 10.04 | 10.03 | 10.01 | 0.7%      |
| Primary Energy          | 8.50  | 10.30 | 10.01 | 9.97  | 10.02 | 10.05 | 10.03 | 10.03 | 10.07 | 10.09 | 10.08 | 10.07 | 10.08 | 10.08 | 10.06 | 10.04 | 10.04 | 10.02 | 10.00 | 9.98  | 9.97  | 9.95  | 0.7%      |
| Petroleum Products 2/   | 8.50  | 10.30 | 10.02 | 9.97  | 10.02 | 10.05 | 10.03 | 10.03 | 10.06 | 10.08 | 10.08 | 10.06 | 10.07 | 10.07 | 10.05 | 10.03 | 10.03 | 10.01 | 9.99  | 9.97  | 9.96  | 9.94  | 0.7%      |
| Distillate Fuel 6/      | 8.15  | 9.70  | 9.54  | 9.51  | 9.55  | 9.53  | 9.54  | 9.57  | 9.57  | 9.58  | 9.63  | 9.61  | 9.60  | 9.60  | 9.59  | 9.59  | 9.58  | 9.56  | 9.54  | 9.52  | 9.49  | 9.48  | 0.7%      |
| Jet Fuel 7/             | 4.39  | 5.93  | 5.77  | 5.78  | 5.87  | 5.88  | 5.92  | 5.99  | 6.02  | 6.06  | 6.14  | 6.11  | 6.10  | 6.08  | 6.07  | 6.06  | 6.06  | 6.05  | 6.05  | 6.04  | 6.04  | 6.04  | 1.5%      |
| Motor Gasoline 8/       | 9.13  | 11.02 | 10.69 | 10.64 | 10.70 | 10.74 | 10.71 | 10.69 | 10.74 | 10.76 | 10.74 | 10.73 | 10.74 | 10.75 | 10.73 | 10.72 | 10.72 | 10.69 | 10.69 | 10.67 | 10.66 | 10.64 | 0.7%      |
| Residual Fuel           | 1.80  | 2.62  | 2.50  | 2.49  | 2.51  | 2.49  | 2.47  | 2.47  | 2.45  | 2.43  | 2.43  | 2.40  | 2.39  | 2.40  | 2.41  | 2.42  | 2.44  | 2.45  | 2.47  | 2.49  | 2.51  | 2.52  | 1.5%      |
| Liquid Petroleum Gas 9/ | 8.95  | 14.75 | 14.52 | 14.47 | 14.42 | 14.46 | 14.36 | 14.34 | 14.32 | 14.32 | 14.33 | 14.28 | 14.26 | 14.23 | 14.10 | 13.96 | 14.07 | 13.92 | 13.91 | 13.90 | 13.89 | 13.93 | 2.0%      |
| Natural Gas 10/         | 7.85  | 8.24  | 8.15  | 8.14  | 8.16  | 8.25  | 8.37  | 8.50  | 8.61  | 8.67  | 8.70  | 8.74  | 8.75  | 8.76  | 8.75  | 8.74  | 8.73  | 8.71  | 8.69  | 8.67  | 8.65  | 8.66  | 0.4%      |
| Ethanol (E85) 11/       | 14.35 | 19.35 | 18.80 | 18.74 | 19.07 | 19.11 | 19.17 | 19.12 | 19.21 | 19.26 | 19.28 | 19.30 | 19.31 | 19.32 | 19.32 | 19.33 | 19.36 | 19.35 | 19.36 | 19.37 | 19.37 | 19.38 | 1.4%      |
| Methanol (M85) 12/      | 8.99  | 15.15 | 15.11 | 15.11 | 15.50 | 15.52 | 15.53 | 15.53 | 15.56 | 15.57 | 15.59 | 15.60 | 15.61 | 15.61 | 15.61 | 15.60 | 15.63 | 15.61 | 15.62 | 15.62 | 15.63 | 15.63 | 2.5%      |
| Electricity             | 23.91 | 22.04 | 21.98 | 21.55 | 21.08 | 20.61 | 20.20 | 20.34 | 20.45 | 20.17 | 19.78 | 19.91 | 19.66 | 19.57 | 19.49 | 19.62 | 19.75 | 19.82 | 19.88 | 19.89 | 19.88 | 19.86 | -0.8%     |
| Average End-Use Energy  | 10.77 | 11.72 | 11.54 | 11.43 | 11.53 | 11.46 | 11.34 | 11.40 | 11.33 | 11.24 | 11.15 | 11.13 | 11.04 | 11.04 | 11.04 | 10.99 | 10.98 | 10.98 | 10.98 | 10.98 | 10.98 | 11.00 | 0.1%      |
| Primary Energy          | 10.40 | 11.47 | 11.28 | 11.17 | 11.26 | 11.21 | 11.10 | 11.14 | 11.09 | 11.02 | 10.93 | 10.92 | 10.84 | 10.84 | 10.83 | 10.79 | 10.78 | 10.78 | 10.78 | 10.77 | 10.77 | 10.78 | 0.2%      |
| Electricity             | 28.89 | 27.70 | 27.66 | 27.11 | 27.58 | 27.00 | 26.17 | 26.50 | 25.80 | 25.10 | 24.41 | 24.33 | 23.80 | 23.76 | 23.78 | 23.53 | 23.46 | 23.51 | 23.58 | 23.64 | 23.69 | 23.74 | -0.9%     |
| Electric Generators 13/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Fossil Fuel Average     | 2.23  | 2.66  | 2.65  | 2.65  | 2.64  | 2.67  | 2.70  | 2.77  | 2.81  | 2.83  | 2.82  | 2.86  | 2.86  | 2.88  | 2.89  | 2.88  | 2.90  | 2.89  | 2.89  | 2.89  | 2.93  | 2.95  | 1.3%      |
| Petroleum Products      | 2.07  | 3.44  | 3.30  | 3.30  | 3.32  | 3.31  | 3.30  | 3.31  | 3.30  | 3.30  | 3.30  | 3.30  | 3.31  | 3.33  | 3.35  | 3.37  | 3.39  | 3.41  | 3.42  | 3.44  | 3.45  | 3.47  | 2.4%      |
| Distillate Fuel         | 3.24  | 4.84  | 4.73  | 4.72  | 4.77  | 4.79  | 4.81  | 4.85  | 4.88  | 4.93  | 5.02  | 5.02  | 5.02  | 5.07  | 5.09  | 5.13  | 5.16  | 5.17  | 5.16  | 5.17  | 5.18  | 5.20  | 2.2%      |
| Residual Fuel           | 2.06  | 3.42  | 3.29  | 3.28  | 3.30  | 3.29  | 3.28  | 3.29  | 3.28  | 3.27  | 3.27  | 3.26  | 3.25  | 3.27  | 3.28  | 3.29  | 3.31  | 3.32  | 3.34  | 3.36  | 3.37  | 3.39  | 2.3%      |
| Natural Gas             | 2.79  | 3.13  | 3.14  | 3.21  | 3.24  | 3.32  | 3.40  | 3.45  | 3.48  | 3.49  | 3.49  | 3.48  | 3.47  | 3.47  | 3.46  | 3.46  | 3.47  | 3.47  | 3.48  | 3.49  | 3.51  | 3.56  | 1.1%      |
| Steam Coal              | 1.77  | 1.78  | 1.72  | 1.70  | 1.66  | 1.66  | 1.64  | 1.63  | 1.64  | 1.63  | 1.59  | 1.62  | 1.62  | 1.59  | 1.57  | 1.56  | 1.54  | 1.51  | 1.51  | 1.48  | 1.53  | 1.52  | -0.7%     |

**Table 11. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**01 - New England**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Average Price to All Users 14/  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Petroleum Products 2/   | 6.66  | 8.58  | 8.26  | 8.29  | 8.34  | 8.42  | 8.49  | 8.52  | 8.63  | 8.72  | 8.78  | 8.86  | 8.91  | 8.94  | 8.94  | 8.96  | 8.98  | 8.98  | 8.97  | 8.96  | 8.96  | 8.96  | 1.4%      |
| Distillate Fuel   | 6.29  | 7.77  | 7.64  | 7.63  | 7.69  | 7.70  | 7.72  | 7.76  | 7.79  | 7.83  | 7.91  | 7.91  | 7.92  | 7.95  | 7.97  | 8.00  | 8.03  | 8.03  | 8.02  | 8.03  | 8.04  | 8.04  | 1.1%      |
| Jet Fuel  | 4.39  | 5.93  | 5.77  | 5.78  | 5.87  | 5.88  | 5.92  | 5.99  | 6.02  | 6.06  | 6.14  | 6.11  | 6.10  | 6.08  | 6.07  | 6.06  | 6.06  | 6.05  | 6.05  | 6.04  | 6.04  | 6.04  | 1.5%      |
| Liquefied Petroleum Gas   | 12.94 | 15.12 | 14.90 | 14.86 | 14.82 | 14.87 | 14.78 | 14.78 | 14.77 | 14.78 | 14.80 | 14.76 | 14.74 | 14.72 | 14.60 | 14.46 | 14.58 | 14.45 | 14.45 | 14.46 | 14.47 | 14.53 | 0.5%      |
| Motor Gasoline 8/   | 9.13  | 11.02 | 10.69 | 10.64 | 10.70 | 10.74 | 10.71 | 10.69 | 10.74 | 10.76 | 10.74 | 10.73 | 10.74 | 10.75 | 10.73 | 10.72 | 10.72 | 10.70 | 10.69 | 10.67 | 10.66 | 10.64 | 0.7%      |
| Residual Fuel   | 2.13  | 3.37  | 3.24  | 3.24  | 3.25  | 3.24  | 3.22  | 3.23  | 3.21  | 3.19  | 3.19  | 3.16  | 3.14  | 3.15  | 3.16  | 3.16  | 3.18  | 3.19  | 3.21  | 3.22  | 3.24  | 3.25  | 1.9%      |
| Natural Gas   | 5.60  | 6.07  | 6.02  | 5.96  | 5.97  | 5.93  | 5.86  | 5.73  | 5.65  | 5.57  | 5.51  | 5.40  | 5.33  | 5.26  | 5.20  | 5.17  | 5.14  | 5.13  | 5.13  | 5.14  | 5.15  | 5.19  | -0.3%     |
| Coal  | 1.79  | 1.80  | 1.74  | 1.71  | 1.68  | 1.68  | 1.66  | 1.65  | 1.65  | 1.65  | 1.61  | 1.64  | 1.63  | 1.61  | 1.59  | 1.57  | 1.55  | 1.53  | 1.53  | 1.50  | 1.54  | 1.53  | -0.7%     |
| Ethanol (E85) 11/   | 14.35 | 19.35 | 18.80 | 18.74 | 19.07 | 19.11 | 19.17 | 19.12 | 19.21 | 19.26 | 19.28 | 19.30 | 19.31 | 19.32 | 19.32 | 19.33 | 19.36 | 19.35 | 19.36 | 19.37 | 19.37 | 19.38 | 1.4%      |
| Methanol (M85) 12/  | 8.99  | 15.15 | 15.11 | 15.11 | 15.50 | 15.52 | 15.53 | 15.53 | 15.56 | 15.57 | 15.59 | 15.60 | 15.61 | 15.61 | 15.61 | 15.60 | 15.63 | 15.61 | 15.62 | 15.62 | 15.63 | 15.63 | 2.5%      |
| Electricity   | 28.89 | 27.70 | 27.66 | 27.11 | 27.58 | 27.00 | 26.17 | 26.50 | 25.80 | 25.10 | 24.41 | 24.33 | 23.80 | 23.76 | 23.78 | 23.53 | 23.46 | 23.51 | 23.58 | 23.64 | 23.69 | 23.74 | -0.9%     |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Residential   | 8.48  | 9.15  | 9.11  | 9.06  | 9.15  | 9.16  | 9.09  | 9.20  | 9.20  | 9.22  | 9.17  | 9.21  | 9.18  | 9.25  | 9.26  | 9.27  | 9.30  | 9.36  | 9.37  | 9.40  | 9.43  | 9.49  | 0.5%      |
| Commercial  | 6.09  | 6.23  | 6.24  | 6.20  | 6.32  | 6.27  | 6.19  | 6.26  | 6.16  | 6.06  | 5.97  | 5.97  | 5.90  | 5.90  | 5.92  | 5.87  | 5.86  | 5.86  | 5.85  | 5.85  | 5.84  | 5.83  | -0.2%     |
| Industrial  | 3.00  | 3.12  | 3.11  | 3.11  | 3.22  | 3.23  | 3.22  | 3.29  | 3.25  | 3.20  | 3.14  | 3.14  | 3.07  | 3.08  | 3.12  | 3.13  | 3.16  | 3.18  | 3.20  | 3.23  | 3.27  | 3.31  | 0.4%      |
| Transportation  | 8.42  | 10.59 | 10.52 | 10.68 | 10.91 | 11.15 | 11.30 | 11.47 | 11.68 | 11.86 | 11.99 | 12.12 | 12.23 | 12.35 | 12.46 | 12.58 | 12.71 | 12.78 | 12.85 | 12.92 | 12.98 | 13.06 | 2.0%      |
| Total Non-Renewable Expend.   | 25.99 | 29.09 | 28.98 | 29.05 | 29.59 | 29.80 | 29.80 | 30.22 | 30.29 | 30.34 | 30.27 | 30.44 | 30.38 | 30.59 | 30.75 | 30.86 | 31.04 | 31.17 | 31.27 | 31.40 | 31.53 | 31.69 | 0.9%      |
| Trans. Renewable Expend.  | 0.00  | 0.01  | 0.01  | 0.02  | 0.02  | 0.03  | 0.03  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 17.7%     |
| Total Expenditures  | 25.99 | 29.10 | 28.99 | 29.07 | 29.61 | 29.83 | 29.83 | 30.26 | 30.34 | 30.38 | 30.32 | 30.50 | 30.44 | 30.65 | 30.81 | 30.92 | 31.11 | 31.24 | 31.35 | 31.47 | 31.60 | 31.76 | 0.9%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 12. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**02 - Middle Atlantic**

|                                | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| <b>Residential</b>             | 13.66 | 13.72 | 13.51 | 13.37 | 13.29 | 13.32 | 13.30 | 13.36 | 13.33 | 13.28 | 13.20 | 13.35 | 13.29 | 13.30 | 13.30 | 13.47 | 13.50 | 13.51 | 13.50 | 13.53 | 13.57 | 13.62 | 0.0%      |
| Primary Energy 1/              | 7.76  | 8.28  | 8.19  | 8.16  | 8.15  | 8.15  | 8.16  | 8.17  | 8.18  | 8.16  | 8.15  | 8.11  | 8.07  | 8.04  | 8.01  | 7.98  | 7.97  | 7.94  | 7.92  | 7.90  | 7.88  | 7.88  | 0.1%      |
| Petroleum Products 2/          | 7.10  | 8.81  | 8.69  | 8.68  | 8.74  | 8.76  | 8.77  | 8.81  | 8.85  | 8.90  | 8.98  | 8.97  | 8.96  | 8.99  | 8.99  | 9.00  | 9.03  | 9.03  | 9.01  | 9.01  | 9.02  | 9.03  | 1.1%      |
| Distillate Fuel                | 6.47  | 7.94  | 7.82  | 7.81  | 7.87  | 7.88  | 7.90  | 7.94  | 7.98  | 8.03  | 8.11  | 8.10  | 8.09  | 8.13  | 8.14  | 8.16  | 8.19  | 8.19  | 8.17  | 8.17  | 8.18  | 8.19  | 1.1%      |
| Liquefied Petroleum Gas        | 13.14 | 16.80 | 16.60 | 16.58 | 16.56 | 16.62 | 16.55 | 16.57 | 16.57 | 16.61 | 16.64 | 16.62 | 16.63 | 16.62 | 16.52 | 16.40 | 16.54 | 16.42 | 16.44 | 16.46 | 16.48 | 16.56 | 1.1%      |
| Natural Gas                    | 8.23  | 8.21  | 8.13  | 8.09  | 8.06  | 8.06  | 8.07  | 8.07  | 8.06  | 8.03  | 7.98  | 7.93  | 7.88  | 7.83  | 7.80  | 7.76  | 7.74  | 7.71  | 7.69  | 7.67  | 7.65  | 7.64  | -0.3%     |
| Electricity                    | 31.66 | 30.54 | 29.72 | 29.01 | 28.46 | 28.38 | 28.03 | 28.07 | 27.75 | 27.39 | 26.95 | 27.53 | 27.24 | 27.23 | 27.20 | 27.76 | 27.80 | 27.76 | 27.67 | 27.76 | 27.80 | 27.87 | -0.6%     |
| <b>Commercial</b>              | 13.81 | 13.51 | 13.08 | 12.75 | 12.49 | 12.41 | 12.23 | 12.30 | 12.07 | 11.89 | 11.66 | 11.82 | 11.64 | 11.57 | 11.53 | 11.68 | 11.71 | 11.68 | 11.64 | 11.65 | 11.67 | 11.74 | -0.7%     |
| Primary Energy 1/              | 4.66  | 5.26  | 5.18  | 5.18  | 5.20  | 5.23  | 5.26  | 5.30  | 5.33  | 5.34  | 5.34  | 5.33  | 5.31  | 5.30  | 5.30  | 5.30  | 5.31  | 5.31  | 5.31  | 5.32  | 5.33  | 5.35  | 0.6%      |
| Petroleum Products 2/          | 3.76  | 5.43  | 5.28  | 5.27  | 5.31  | 5.33  | 5.34  | 5.37  | 5.39  | 5.43  | 5.48  | 5.48  | 5.47  | 5.49  | 5.50  | 5.51  | 5.53  | 5.53  | 5.52  | 5.53  | 5.54  | 5.55  | 1.8%      |
| Distillate Fuel                | 4.03  | 5.66  | 5.54  | 5.53  | 5.59  | 5.60  | 5.62  | 5.66  | 5.70  | 5.75  | 5.83  | 5.82  | 5.81  | 5.85  | 5.86  | 5.89  | 5.91  | 5.91  | 5.89  | 5.89  | 5.90  | 5.91  | 1.8%      |
| Residual Fuel                  | 2.55  | 4.06  | 3.87  | 3.87  | 3.88  | 3.92  | 3.92  | 3.94  | 3.95  | 3.96  | 3.97  | 3.99  | 3.98  | 4.00  | 4.01  | 4.03  | 4.04  | 4.06  | 4.07  | 4.09  | 4.11  | 4.12  | 2.2%      |
| Natural Gas 3/                 | 5.10  | 5.30  | 5.24  | 5.25  | 5.26  | 5.30  | 5.34  | 5.39  | 5.42  | 5.42  | 5.40  | 5.39  | 5.37  | 5.35  | 5.34  | 5.33  | 5.34  | 5.35  | 5.35  | 5.36  | 5.37  | 5.39  | 0.3%      |
| Electricity                    | 29.02 | 27.34 | 26.23 | 25.23 | 24.41 | 24.08 | 23.45 | 23.54 | 22.80 | 22.25 | 21.59 | 22.03 | 21.53 | 21.36 | 21.25 | 21.66 | 21.72 | 21.64 | 21.53 | 21.55 | 21.59 | 21.75 | -1.3%     |
| <b>Industrial 4/</b>           | 5.07  | 5.59  | 5.43  | 5.37  | 5.34  | 5.34  | 5.34  | 5.38  | 5.41  | 5.42  | 5.37  | 5.46  | 5.32  | 5.34  | 5.35  | 5.47  | 5.51  | 5.53  | 5.52  | 5.56  | 5.60  | 5.64  | 0.5%      |
| Primary Energy                 | 2.96  | 3.70  | 3.63  | 3.65  | 3.70  | 3.74  | 3.78  | 3.82  | 3.88  | 3.93  | 3.94  | 3.96  | 3.85  | 3.88  | 3.90  | 3.95  | 3.98  | 4.00  | 4.00  | 4.03  | 4.06  | 4.08  | 1.5%      |
| Petroleum Products 2/          | 3.23  | 4.84  | 4.67  | 4.67  | 4.74  | 4.76  | 4.77  | 4.79  | 4.90  | 4.98  | 5.01  | 5.04  | 4.77  | 4.82  | 4.86  | 4.96  | 4.98  | 5.02  | 4.98  | 5.05  | 5.09  | 5.07  | 2.1%      |
| Distillate Fuel                | 4.19  | 5.78  | 5.66  | 5.65  | 5.71  | 5.73  | 5.74  | 5.78  | 5.82  | 5.87  | 5.95  | 5.95  | 5.94  | 5.97  | 5.98  | 6.01  | 6.03  | 6.03  | 6.01  | 6.02  | 6.02  | 6.03  | 1.7%      |
| Liquefied Petroleum Gas        | 9.21  | 11.34 | 11.14 | 11.12 | 11.09 | 11.16 | 11.09 | 11.10 | 11.11 | 11.14 | 11.18 | 11.16 | 11.16 | 11.16 | 11.05 | 10.93 | 11.07 | 10.95 | 10.98 | 10.99 | 11.02 | 11.10 | 0.9%      |
| Residual Fuel                  | 2.43  | 3.86  | 3.67  | 3.67  | 3.68  | 3.71  | 3.72  | 3.73  | 3.75  | 3.76  | 3.76  | 3.78  | 3.78  | 3.79  | 3.81  | 3.82  | 3.84  | 3.85  | 3.87  | 3.88  | 3.90  | 3.92  | 2.2%      |
| Natural Gas 5/                 | 3.60  | 3.77  | 3.75  | 3.79  | 3.85  | 3.92  | 4.00  | 4.06  | 4.11  | 4.13  | 4.13  | 4.13  | 4.13  | 4.13  | 4.13  | 4.14  | 4.16  | 4.18  | 4.20  | 4.22  | 4.24  | 4.28  | 0.8%      |
| Metallurgical Coal             | 1.72  | 1.75  | 1.72  | 1.71  | 1.69  | 1.67  | 1.66  | 1.65  | 1.63  | 1.62  | 1.61  | 1.60  | 1.59  | 1.57  | 1.57  | 1.56  | 1.55  | 1.54  | 1.53  | 1.51  | 1.50  | 1.50  | -0.6%     |
| Steam Coal                     | 1.37  | 1.29  | 1.29  | 1.27  | 1.26  | 1.24  | 1.22  | 1.20  | 1.18  | 1.17  | 1.16  | 1.14  | 1.13  | 1.12  | 1.11  | 1.11  | 1.09  | 1.09  | 1.08  | 1.07  | 1.07  | 1.06  | -1.2%     |
| Electricity                    | 17.16 | 16.79 | 16.13 | 15.51 | 14.97 | 14.70 | 14.43 | 14.51 | 14.22 | 13.95 | 13.49 | 13.95 | 13.64 | 13.53 | 13.47 | 13.93 | 13.98 | 13.87 | 13.81 | 13.80 | 13.86 | 14.02 | -0.9%     |
| <b>Transportation</b>          | 7.44  | 9.46  | 9.19  | 9.14  | 9.17  | 9.19  | 9.18  | 9.17  | 9.20  | 9.22  | 9.22  | 9.21  | 9.20  | 9.18  | 9.16  | 9.13  | 9.13  | 9.09  | 9.07  | 9.05  | 9.02  | 9.01  | 0.9%      |
| Primary Energy                 | 7.40  | 9.43  | 9.15  | 9.11  | 9.14  | 9.15  | 9.14  | 9.13  | 9.17  | 9.18  | 9.18  | 9.17  | 9.16  | 9.14  | 9.12  | 9.09  | 9.09  | 9.04  | 9.03  | 9.00  | 8.98  | 8.96  | 0.9%      |
| Petroleum Products 2/          | 7.40  | 9.43  | 9.15  | 9.11  | 9.14  | 9.15  | 9.14  | 9.13  | 9.16  | 9.18  | 9.18  | 9.16  | 9.15  | 9.13  | 9.10  | 9.07  | 9.07  | 9.03  | 9.01  | 8.98  | 8.96  | 8.94  | 0.9%      |
| Distillate Fuel 6/             | 7.72  | 9.56  | 9.40  | 9.37  | 9.41  | 9.39  | 9.40  | 9.43  | 9.43  | 9.45  | 9.49  | 9.47  | 9.46  | 9.46  | 9.45  | 9.45  | 9.44  | 9.42  | 9.40  | 9.38  | 9.36  | 9.34  | 0.9%      |
| Jet Fuel 7/                    | 4.10  | 5.67  | 5.51  | 5.52  | 5.61  | 5.62  | 5.66  | 5.73  | 5.76  | 5.80  | 5.87  | 5.86  | 5.85  | 5.85  | 5.84  | 5.84  | 5.84  | 5.84  | 5.84  | 5.84  | 5.84  | 5.84  | 1.6%      |
| Motor Gasoline 8/              | 8.34  | 10.57 | 10.24 | 10.19 | 10.23 | 10.26 | 10.25 | 10.22 | 10.27 | 10.29 | 10.28 | 10.27 | 10.28 | 10.26 | 10.23 | 10.20 | 10.22 | 10.17 | 10.16 | 10.14 | 10.12 | 10.10 | 0.9%      |
| Residual Fuel                  | 1.99  | 3.44  | 3.25  | 3.24  | 3.25  | 3.29  | 3.30  | 3.31  | 3.32  | 3.33  | 3.33  | 3.35  | 3.34  | 3.35  | 3.37  | 3.38  | 3.40  | 3.41  | 3.43  | 3.44  | 3.46  | 3.48  | 2.6%      |
| Liquid Petroleum Gas 9/        | 10.95 | 14.67 | 14.45 | 14.40 | 14.35 | 14.38 | 14.28 | 14.27 | 14.24 | 14.25 | 14.26 | 14.21 | 14.19 | 14.16 | 14.03 | 13.88 | 13.99 | 13.84 | 13.84 | 13.82 | 13.82 | 13.86 | 1.1%      |
| Natural Gas 10/                | 6.81  | 7.25  | 7.12  | 7.10  | 7.15  | 7.25  | 7.40  | 7.56  | 7.73  | 7.86  | 7.95  | 8.04  | 8.11  | 8.18  | 8.21  | 8.23  | 8.28  | 8.28  | 8.29  | 8.29  | 8.29  | 8.31  | 0.9%      |
| Ethanol (E85) 11/              | 14.35 | 18.44 | 17.89 | 17.83 | 18.16 | 18.20 | 18.26 | 18.21 | 18.30 | 18.35 | 18.37 | 18.39 | 18.41 | 18.41 | 18.41 | 18.42 | 18.45 | 18.44 | 18.45 | 18.46 | 18.47 | 18.47 | 1.2%      |
| Methanol (M85) 12/             | 8.99  | 13.84 | 13.81 | 13.81 | 14.19 | 14.21 | 14.23 | 14.22 | 14.25 | 14.27 | 14.28 | 14.29 | 14.31 | 14.30 | 14.30 | 14.30 | 14.32 | 14.31 | 14.32 | 14.32 | 14.32 | 14.32 | 2.1%      |
| Electricity                    | 21.23 | 19.81 | 19.22 | 18.68 | 18.20 | 17.90 | 17.50 | 17.34 | 17.18 | 16.96 | 16.67 | 16.96 | 16.65 | 16.61 | 16.64 | 16.72 | 16.70 | 16.62 | 16.66 | 16.70 | 16.67 | 16.62 | -1.1%     |
| <b>Average End-Use Energy</b>  | 9.18  | 10.00 | 9.74  | 9.62  | 9.56  | 9.54  | 9.49  | 9.51  | 9.49  | 9.46  | 9.40  | 9.47  | 9.39  | 9.38  | 9.36  | 9.43  | 9.44  | 9.44  | 9.41  | 9.42  | 9.43  | 9.44  | 0.1%      |
| Primary Energy                 | 8.76  | 9.72  | 9.46  | 9.35  | 9.30  | 9.29  | 9.25  | 9.26  | 9.25  | 9.23  | 9.18  | 9.24  | 9.17  | 9.15  | 9.13  | 9.19  | 9.20  | 9.19  | 9.17  | 9.18  | 9.18  | 9.19  | 0.2%      |
| Electricity                    | 26.83 | 25.73 | 24.86 | 24.05 | 23.38 | 23.13 | 22.68 | 22.74 | 22.27 | 21.87 | 21.34 | 21.83 | 21.47 | 21.36 | 21.28 | 21.74 | 21.78 | 21.71 | 21.62 | 21.65 | 21.70 | 21.83 | -0.9%     |
| <b>Electric Generators 13/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Fossil Fuel Average            | 1.67  | 1.77  | 1.68  | 1.66  | 1.65  | 1.69  | 1.71  | 1.74  | 1.79  | 1.82  | 1.82  | 1.91  | 1.93  | 1.94  | 1.97  | 2.01  | 2.07  | 2.11  | 2.13  | 2.13  | 2.13  | 2.16  | 1.2%      |
| Petroleum Products             | 2.10  | 3.41  | 3.21  | 3.21  | 3.22  | 3.24  | 3.25  | 3.27  | 3.28  | 3.30  | 3.31  | 3.33  | 3.34  | 3.35  | 3.37  | 3.40  | 3.41  | 3.43  | 3.45  | 3.47  | 3.49  | 3.50  | 2.3%      |
| Distillate Fuel                | 3.01  | 4.97  | 4.85  | 4.84  | 4.90  | 4.91  | 4.93  | 4.97  | 5.01  | 5.06  | 5.14  | 5.13  | 5.12  | 5.16  | 5.17  | 5.19  | 5.22  | 5.22  | 5.20  | 5.20  | 5.21  | 5.22  | 2.5%      |
| Residual Fuel                  | 2.08  | 3.37  | 3.18  | 3.18  | 3.19  | 3.22  | 3.23  | 3.25  | 3.26  | 3.27  | 3.28  | 3.29  | 3.29  | 3.31  | 3.32  | 3.33  | 3.35  | 3.37  | 3.38  | 3.39  | 3.41  | 3.43  | 2.3%      |
| Natural Gas                    | 2.65  | 2.87  | 2.82  | 2.87  | 2.94  | 3.04  | 3.06  | 3.15  | 3.20  | 3.23  | 3.26  | 3.24  | 3.26  | 3.27  | 3.27  | 3.31  | 3.35  | 3.38  | 3.41  | 3.44  | 3.46  | 3.50  | 1.3%      |
| Steam Coal                     | 1.40  | 1.43  | 1.37  | 1.35  | 1.34  | 1.33  | 1.31  | 1.30  | 1.29  | 1.28  | 1.26  | 1.28  | 1.28  | 1.27  | 1.26  | 1.25  | 1.24  | 1.23  | 1.21  | 1.20  | 1.19  | 1.19  | -0.7%     |

**Table 12. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**02 - Middle Atlantic**

|                                   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Average Price to All Users 14/    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Petroleum Products 2/             | 6.32  | 8.20  | 8.00  | 8.01  | 8.06  | 8.05  | 8.06  | 8.07  | 8.13  | 8.17  | 8.21  | 8.20  | 8.20  | 8.20  | 8.19  | 8.20  | 8.20  | 8.19  | 8.18  | 8.18  | 8.17  | 8.15  | 1.2%      |
| Distillate Fuel                   | 6.57  | 8.27  | 8.13  | 8.12  | 8.18  | 8.18  | 8.20  | 8.24  | 8.26  | 8.30  | 8.36  | 8.35  | 8.35  | 8.36  | 8.37  | 8.38  | 8.39  | 8.39  | 8.37  | 8.37  | 8.36  | 8.36  | 1.1%      |
| Jet Fuel                          | 4.10  | 5.67  | 5.51  | 5.52  | 5.61  | 5.62  | 5.66  | 5.73  | 5.76  | 5.80  | 5.87  | 5.86  | 5.85  | 5.85  | 5.84  | 5.84  | 5.84  | 5.84  | 5.84  | 5.84  | 5.84  | 5.84  | 1.6%      |
| Liquefied Petroleum Gas           | 11.55 | 14.64 | 14.42 | 14.38 | 14.33 | 14.38 | 14.29 | 14.28 | 14.04 | 13.95 | 13.96 | 13.87 | 14.20 | 14.17 | 14.04 | 13.89 | 14.00 | 13.86 | 13.86 | 13.85 | 13.85 | 13.90 | 0.8%      |
| Motor Gasoline 8/                 | 8.34  | 10.57 | 10.25 | 10.19 | 10.23 | 10.26 | 10.25 | 10.22 | 10.27 | 10.30 | 10.28 | 10.27 | 10.28 | 10.26 | 10.23 | 10.20 | 10.22 | 10.17 | 10.16 | 10.14 | 10.12 | 10.11 | 0.9%      |
| Residual Fuel                     | 2.19  | 3.56  | 3.38  | 3.40  | 3.42  | 3.43  | 3.45  | 3.46  | 3.48  | 3.50  | 3.52  | 3.53  | 3.56  | 3.57  | 3.59  | 3.61  | 3.62  | 3.64  | 3.66  | 3.68  | 3.69  | 3.70  | 2.4%      |
| Natural Gas                       | 5.47  | 5.80  | 5.74  | 5.70  | 5.68  | 5.68  | 5.65  | 5.64  | 5.58  | 5.54  | 5.49  | 5.38  | 5.31  | 5.27  | 5.22  | 5.16  | 5.11  | 5.09  | 5.07  | 5.07  | 5.09  | 5.11  | -0.3%     |
| Coal                              | 1.45  | 1.42  | 1.36  | 1.35  | 1.34  | 1.32  | 1.31  | 1.29  | 1.28  | 1.28  | 1.26  | 1.27  | 1.27  | 1.26  | 1.25  | 1.24  | 1.23  | 1.22  | 1.20  | 1.19  | 1.18  | 1.18  | -0.9%     |
| Ethanol (E85) 11/                 | 14.35 | 18.44 | 17.89 | 17.83 | 18.16 | 18.20 | 18.26 | 18.21 | 18.30 | 18.35 | 18.37 | 18.39 | 18.41 | 18.41 | 18.41 | 18.42 | 18.45 | 18.44 | 18.45 | 18.46 | 18.47 | 18.47 | 1.2%      |
| Methanol (M85) 12/                | 8.99  | 13.84 | 13.81 | 13.81 | 14.19 | 14.21 | 14.23 | 14.22 | 14.25 | 14.27 | 14.28 | 14.29 | 14.31 | 14.30 | 14.30 | 14.32 | 14.31 | 14.32 | 14.32 | 14.32 | 14.32 | 14.32 | 2.1%      |
| Electricity                       | 26.83 | 25.73 | 24.86 | 24.05 | 23.38 | 23.13 | 22.68 | 22.74 | 22.27 | 21.87 | 21.34 | 21.83 | 21.47 | 21.36 | 21.28 | 21.74 | 21.78 | 21.71 | 21.62 | 21.65 | 21.70 | 21.83 | -0.9%     |
| Non-Renewable Energy Expenditures |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| by Sector (billion 1998 dollars)  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Residential                       | 21.90 | 23.11 | 22.75 | 22.53 | 22.40 | 22.51 | 22.41 | 22.51 | 22.46 | 22.46 | 22.29 | 22.54 | 22.43 | 22.50 | 22.44 | 22.70 | 22.74 | 22.80 | 22.73 | 22.79 | 22.86 | 23.02 | 0.2%      |
| Commercial                        | 17.39 | 17.54 | 17.11 | 16.76 | 16.49 | 16.44 | 16.27 | 16.40 | 16.18 | 16.03 | 15.81 | 16.06 | 15.89 | 15.85 | 15.83 | 16.03 | 16.06 | 16.00 | 15.92 | 15.89 | 15.85 | 15.87 | -0.4%     |
| Industrial                        | 9.35  | 10.14 | 9.90  | 9.87  | 9.96  | 10.09 | 10.21 | 10.39 | 10.45 | 10.47 | 10.35 | 10.56 | 10.32 | 10.37 | 10.46 | 10.76 | 10.89 | 10.91 | 10.91 | 11.00 | 11.11 | 11.23 | 0.8%      |
| Transportation                    | 20.39 | 26.83 | 26.44 | 26.70 | 27.13 | 27.60 | 27.95 | 28.29 | 28.72 | 29.07 | 29.34 | 29.61 | 29.80 | 29.95 | 30.13 | 30.34 | 30.62 | 30.67 | 30.79 | 30.90 | 31.00 | 31.13 | 1.9%      |
| Total Non-Renewable Expend.       | 69.02 | 77.62 | 76.20 | 75.88 | 75.99 | 76.64 | 76.84 | 77.60 | 77.81 | 78.03 | 77.80 | 78.77 | 78.43 | 78.68 | 78.85 | 79.83 | 80.31 | 80.38 | 80.35 | 80.58 | 80.82 | 81.25 | 0.7%      |
| Trans. Renewable Expend.          | 0.01  | 0.02  | 0.03  | 0.04  | 0.06  | 0.07  | 0.08  | 0.09  | 0.11  | 0.12  | 0.13  | 0.14  | 0.15  | 0.15  | 0.16  | 0.17  | 0.17  | 0.18  | 0.18  | 0.18  | 0.18  | 0.18  | 16.9%     |
| Total Expenditures                | 69.03 | 77.64 | 76.24 | 75.92 | 76.05 | 76.70 | 76.92 | 77.69 | 77.91 | 78.15 | 77.93 | 78.91 | 78.58 | 78.83 | 79.01 | 79.99 | 80.48 | 80.56 | 80.53 | 80.76 | 81.00 | 81.43 | 0.8%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 13. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**03 - East North Central**

|                                | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| <b>Residential</b>             | 10.37 | 10.28 | 10.23 | 10.15 | 10.12 | 10.16 | 10.13 | 10.18 | 10.20 | 10.25 | 10.14 | 10.17 | 10.13 | 10.13 | 10.15 | 10.17 | 10.25 | 10.20 | 10.26 | 10.26 | 10.23 | 10.22 | -0.1%     |
| Primary Energy 1/              | 5.78  | 6.18  | 6.14  | 6.12  | 6.12  | 6.14  | 6.16  | 6.19  | 6.21  | 6.20  | 6.18  | 6.16  | 6.15  | 6.14  | 6.12  | 6.11  | 6.10  | 6.08  | 6.07  | 6.07  | 6.07  | 6.09  | 0.2%      |
| Petroleum Products 2/          | 7.37  | 9.59  | 9.47  | 9.49  | 9.54  | 9.61  | 9.61  | 9.66  | 9.69  | 9.75  | 9.83  | 9.82  | 9.82  | 9.90  | 9.89  | 9.89  | 9.95  | 9.96  | 10.00 | 10.06 | 10.12 | 10.19 | 1.5%      |
| Distillate Fuel                | 5.64  | 7.02  | 6.91  | 6.90  | 6.95  | 6.97  | 6.99  | 7.03  | 7.06  | 7.11  | 7.20  | 7.17  | 7.15  | 7.17  | 7.17  | 7.19  | 7.22  | 7.22  | 7.25  | 7.31  | 7.36  | 7.42  | 1.3%      |
| Liquefied Petroleum Gas        | 9.07  | 11.93 | 11.75 | 11.73 | 11.70 | 11.76 | 11.69 | 11.71 | 11.71 | 11.74 | 11.78 | 11.76 | 11.76 | 11.88 | 11.85 | 11.83 | 11.90 | 11.92 | 11.96 | 12.02 | 12.07 | 12.15 | 1.3%      |
| Natural Gas                    | 5.59  | 5.78  | 5.75  | 5.73  | 5.72  | 5.74  | 5.77  | 5.79  | 5.81  | 5.80  | 5.78  | 5.76  | 5.75  | 5.73  | 5.72  | 5.71  | 5.70  | 5.68  | 5.67  | 5.66  | 5.67  | 5.69  | 0.1%      |
| Electricity                    | 23.59 | 22.31 | 22.00 | 21.53 | 21.24 | 21.17 | 20.80 | 20.74 | 20.61 | 20.63 | 20.14 | 20.15 | 19.96 | 19.88 | 19.91 | 19.92 | 20.16 | 19.92 | 20.09 | 20.02 | 19.81 | 19.67 | -0.8%     |
| <b>Commercial</b>              | 11.43 | 11.36 | 11.20 | 11.02 | 10.87 | 10.78 | 10.65 | 10.64 | 10.61 | 10.54 | 10.34 | 10.31 | 10.22 | 10.17 | 10.18 | 10.19 | 10.29 | 10.21 | 10.26 | 10.24 | 10.18 | 10.16 | -0.5%     |
| Primary Energy 1/              | 5.05  | 5.40  | 5.37  | 5.34  | 5.34  | 5.35  | 5.38  | 5.40  | 5.43  | 5.42  | 5.41  | 5.39  | 5.38  | 5.38  | 5.37  | 5.36  | 5.36  | 5.35  | 5.35  | 5.35  | 5.36  | 5.39  | 0.3%      |
| Petroleum Products 2/          | 5.72  | 7.50  | 7.34  | 7.33  | 7.35  | 7.39  | 7.39  | 7.42  | 7.44  | 7.48  | 7.55  | 7.53  | 7.52  | 7.57  | 7.56  | 7.55  | 7.60  | 7.61  | 7.64  | 7.70  | 7.74  | 7.81  | 1.4%      |
| Distillate Fuel                | 3.68  | 5.14  | 5.02  | 5.02  | 5.07  | 5.08  | 5.10  | 5.14  | 5.18  | 5.23  | 5.31  | 5.29  | 5.26  | 5.28  | 5.28  | 5.30  | 5.34  | 5.34  | 5.36  | 5.42  | 5.47  | 5.54  | 1.9%      |
| Residual Fuel                  | 2.39  | 2.84  | 2.67  | 2.68  | 2.70  | 2.72  | 2.73  | 2.75  | 2.76  | 2.78  | 2.80  | 2.81  | 2.83  | 2.84  | 2.86  | 2.88  | 2.89  | 2.91  | 2.93  | 2.94  | 2.96  | 2.97  | 1.0%      |
| Natural Gas 3/                 | 5.11  | 5.37  | 5.34  | 5.31  | 5.31  | 5.32  | 5.35  | 5.38  | 5.40  | 5.40  | 5.38  | 5.36  | 5.35  | 5.35  | 5.34  | 5.33  | 5.32  | 5.32  | 5.31  | 5.31  | 5.32  | 5.35  | 0.2%      |
| Electricity                    | 21.27 | 20.57 | 20.19 | 19.69 | 19.25 | 18.94 | 18.50 | 18.38 | 18.21 | 18.00 | 17.47 | 17.40 | 17.14 | 16.99 | 17.03 | 17.04 | 17.30 | 17.10 | 17.22 | 17.16 | 16.96 | 16.85 | -1.1%     |
| <b>Industrial 4/</b>           | 4.99  | 5.51  | 5.43  | 5.39  | 5.36  | 5.36  | 5.34  | 5.38  | 5.41  | 5.43  | 5.39  | 5.39  | 5.37  | 5.38  | 5.40  | 5.43  | 5.50  | 5.49  | 5.53  | 5.54  | 5.54  | 5.57  | 0.5%      |
| Primary Energy                 | 3.22  | 3.87  | 3.83  | 3.83  | 3.85  | 3.88  | 3.91  | 3.94  | 3.97  | 3.99  | 4.01  | 4.01  | 4.02  | 4.05  | 4.05  | 4.07  | 4.10  | 4.11  | 4.13  | 4.15  | 4.18  | 4.22  | 1.2%      |
| Petroleum Products 2/          | 4.45  | 5.92  | 5.78  | 5.76  | 5.77  | 5.77  | 5.76  | 5.77  | 5.79  | 5.82  | 5.86  | 5.84  | 5.84  | 5.90  | 5.89  | 5.90  | 5.94  | 5.95  | 5.97  | 6.01  | 6.04  | 6.07  | 1.4%      |
| Distillate Fuel                | 4.04  | 5.59  | 5.47  | 5.46  | 5.51  | 5.53  | 5.55  | 5.59  | 5.63  | 5.68  | 5.76  | 5.73  | 5.71  | 5.73  | 5.73  | 5.75  | 5.78  | 5.79  | 5.81  | 5.87  | 5.92  | 5.98  | 1.8%      |
| Liquefied Petroleum Gas        | 9.17  | 11.24 | 11.06 | 11.04 | 11.01 | 11.07 | 11.00 | 11.02 | 11.02 | 11.05 | 11.09 | 11.07 | 11.07 | 11.19 | 11.16 | 11.14 | 11.20 | 11.22 | 11.26 | 11.33 | 11.38 | 11.46 | 1.0%      |
| Residual Fuel                  | 2.52  | 2.88  | 2.71  | 2.73  | 2.74  | 2.76  | 2.77  | 2.79  | 2.81  | 2.82  | 2.84  | 2.85  | 2.87  | 2.89  | 2.90  | 2.92  | 2.93  | 2.95  | 2.97  | 2.98  | 3.00  | 3.01  | 0.8%      |
| Natural Gas 5/                 | 3.01  | 3.26  | 3.26  | 3.28  | 3.32  | 3.37  | 3.45  | 3.50  | 3.55  | 3.57  | 3.57  | 3.57  | 3.58  | 3.59  | 3.60  | 3.61  | 3.63  | 3.64  | 3.66  | 3.67  | 3.70  | 3.74  | 1.0%      |
| Metallurgical Coal             | 1.74  | 1.77  | 1.75  | 1.73  | 1.71  | 1.70  | 1.68  | 1.66  | 1.65  | 1.64  | 1.62  | 1.62  | 1.60  | 1.59  | 1.58  | 1.57  | 1.57  | 1.56  | 1.54  | 1.53  | 1.52  | 1.51  | -0.6%     |
| Steam Coal                     | 1.40  | 1.33  | 1.32  | 1.30  | 1.30  | 1.28  | 1.26  | 1.25  | 1.24  | 1.22  | 1.21  | 1.19  | 1.17  | 1.16  | 1.15  | 1.14  | 1.14  | 1.12  | 1.11  | 1.10  | 1.09  | 1.08  | -1.2%     |
| Electricity                    | 12.49 | 12.60 | 12.41 | 12.11 | 11.83 | 11.68 | 11.48 | 11.52 | 11.55 | 11.52 | 11.21 | 11.21 | 11.02 | 10.94 | 10.98 | 11.01 | 11.26 | 11.11 | 11.21 | 11.15 | 11.00 | 10.95 | -0.6%     |
| <b>Transportation</b>          | 8.03  | 9.87  | 9.59  | 9.55  | 9.56  | 9.57  | 9.58  | 9.56  | 9.60  | 9.62  | 9.64  | 9.63  | 9.63  | 9.64  | 9.63  | 9.64  | 9.65  | 9.64  | 9.63  | 9.62  | 9.61  | 9.60  | 0.8%      |
| Primary Energy                 | 8.01  | 9.85  | 9.58  | 9.53  | 9.55  | 9.56  | 9.57  | 9.55  | 9.59  | 9.61  | 9.63  | 9.62  | 9.61  | 9.62  | 9.62  | 9.62  | 9.63  | 9.62  | 9.62  | 9.61  | 9.60  | 9.58  | 0.8%      |
| Petroleum Products 2/          | 8.01  | 9.85  | 9.58  | 9.54  | 9.55  | 9.56  | 9.57  | 9.55  | 9.59  | 9.61  | 9.63  | 9.62  | 9.61  | 9.62  | 9.62  | 9.62  | 9.63  | 9.62  | 9.62  | 9.60  | 9.59  | 9.58  | 0.8%      |
| Distillate Fuel 6/             | 7.58  | 9.24  | 9.08  | 9.06  | 9.09  | 9.08  | 9.09  | 9.11  | 9.11  | 9.13  | 9.21  | 9.19  | 9.18  | 9.20  | 9.21  | 9.23  | 9.26  | 9.26  | 9.25  | 9.25  | 9.24  | 9.24  | 0.9%      |
| Jet Fuel 7/                    | 3.92  | 5.32  | 5.16  | 5.19  | 5.26  | 5.28  | 5.32  | 5.39  | 5.42  | 5.46  | 5.57  | 5.56  | 5.54  | 5.56  | 5.56  | 5.60  | 5.68  | 5.68  | 5.68  | 5.67  | 5.67  | 5.67  | 1.7%      |
| Motor Gasoline 8/              | 8.67  | 10.65 | 10.32 | 10.27 | 10.28 | 10.30 | 10.31 | 10.27 | 10.32 | 10.34 | 10.34 | 10.33 | 10.33 | 10.34 | 10.34 | 10.34 | 10.34 | 10.33 | 10.33 | 10.32 | 10.31 | 10.30 | 0.8%      |
| Residual Fuel                  | 2.48  | 3.09  | 2.91  | 2.93  | 2.94  | 2.96  | 2.98  | 2.99  | 3.01  | 3.02  | 3.04  | 3.06  | 3.07  | 3.09  | 3.11  | 3.12  | 3.14  | 3.16  | 3.17  | 3.19  | 3.21  | 3.22  | 1.2%      |
| Liquid Petroleum Gas 9/        | 12.67 | 14.96 | 14.75 | 14.70 | 14.65 | 14.68 | 14.58 | 14.56 | 14.54 | 14.54 | 14.55 | 14.50 | 14.48 | 14.57 | 14.52 | 14.47 | 14.51 | 14.50 | 14.51 | 14.54 | 14.56 | 14.60 | 0.6%      |
| Natural Gas 10/                | 6.98  | 7.39  | 7.33  | 7.31  | 7.34  | 7.41  | 7.52  | 7.63  | 7.76  | 7.83  | 7.88  | 7.93  | 7.97  | 8.01  | 8.02  | 8.04  | 8.04  | 8.04  | 8.03  | 8.02  | 8.02  | 8.04  | 0.6%      |
| Ethanol (E85) 11/              | 14.35 | 16.17 | 15.73 | 15.65 | 15.98 | 16.01 | 16.06 | 16.00 | 16.08 | 16.12 | 16.13 | 16.14 | 16.14 | 16.15 | 16.16 | 16.17 | 16.18 | 16.18 | 16.19 | 16.19 | 16.19 | 16.19 | 0.6%      |
| Methanol (M85) 12/             | 8.99  | 11.58 | 11.47 | 11.59 | 13.68 | 13.70 | 14.09 | 14.09 | 14.49 | 14.51 | 14.52 | 14.53 | 14.54 | 14.56 | 14.57 | 14.59 | 14.60 | 14.61 | 14.62 | 14.63 | 14.64 | 14.65 | 2.2%      |
| Electricity                    | 15.87 | 15.12 | 14.76 | 14.41 | 14.13 | 13.88 | 13.53 | 13.31 | 13.13 | 12.83 | 12.55 | 12.65 | 12.48 | 12.37 | 12.28 | 12.20 | 12.19 | 12.09 | 12.00 | 11.93 | 11.83 | 11.75 | -1.4%     |
| <b>Average End-Use Energy</b>  | 7.84  | 8.62  | 8.48  | 8.41  | 8.37  | 8.36  | 8.33  | 8.34  | 8.37  | 8.38  | 8.34  | 8.34  | 8.31  | 8.31  | 8.32  | 8.33  | 8.38  | 8.36  | 8.39  | 8.38  | 8.36  | 8.36  | 0.3%      |
| Primary Energy                 | 7.71  | 8.60  | 8.45  | 8.38  | 8.35  | 8.34  | 8.32  | 8.32  | 8.35  | 8.37  | 8.33  | 8.33  | 8.31  | 8.31  | 8.32  | 8.33  | 8.38  | 8.36  | 8.38  | 8.38  | 8.36  | 8.36  | 0.4%      |
| Electricity                    | 18.41 | 17.96 | 17.70 | 17.29 | 16.94 | 16.76 | 16.43 | 16.39 | 16.31 | 16.25 | 15.84 | 15.82 | 15.62 | 15.52 | 15.54 | 15.55 | 15.78 | 15.60 | 15.72 | 15.65 | 15.46 | 15.36 | -0.8%     |
| <b>Electric Generators 13/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Fossil Fuel Average            | 1.32  | 1.35  | 1.28  | 1.26  | 1.23  | 1.20  | 1.20  | 1.20  | 1.23  | 1.25  | 1.24  | 1.28  | 1.29  | 1.29  | 1.29  | 1.30  | 1.32  | 1.32  | 1.35  | 1.37  | 1.38  | 1.38  | 0.2%      |
| Petroleum Products             | 2.94  | 4.47  | 4.32  | 4.44  | 4.46  | 4.53  | 4.59  | 4.61  | 4.64  | 4.73  | 4.86  | 4.83  | 4.85  | 4.90  | 4.93  | 4.93  | 4.96  | 4.98  | 5.02  | 5.08  | 5.14  | 5.19  | 2.6%      |
| Distillate Fuel                | 3.23  | 4.92  | 4.80  | 4.80  | 4.85  | 4.87  | 4.88  | 4.92  | 4.96  | 5.01  | 5.09  | 5.07  | 5.05  | 5.07  | 5.07  | 5.08  | 5.12  | 5.12  | 5.15  | 5.21  | 5.26  | 5.32  | 2.3%      |
| Residual Fuel                  | 2.71  | 3.42  | 3.24  | 3.26  | 3.27  | 3.29  | 3.31  | 3.32  | 3.34  | 3.35  | 3.37  | 3.39  | 3.40  | 3.42  | 3.43  | 3.45  | 3.47  | 3.48  | 3.50  | 3.52  | 3.53  | 3.55  | 1.2%      |
| Natural Gas                    | 1.75  | 2.14  | 2.15  | 2.16  | 2.21  | 2.29  | 2.35  | 2.41  | 2.46  | 2.47  | 2.60  | 2.67  | 2.68  | 2.72  | 2.75  | 2.76  | 2.77  | 2.80  | 2.81  | 2.84  | 2.89  | 2.94  | 2.4%      |
| Steam Coal                     | 1.29  | 1.28  | 1.23  | 1.21  | 1.17  | 1.15  | 1.14  | 1.13  | 1.14  | 1.14  | 1.10  | 1.12  | 1.11  | 1.10  | 1.09  | 1.08  | 1.07  | 1.06  | 1.05  | 1.05  | 1.03  | 1.02  | -1.0%     |

**Table 13. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**03 - East North Central**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Average Price to All Users 14/  |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Petroleum Products 2/   | 7.18  | 8.97  | 8.74  | 8.71  | 8.72  | 8.74  | 8.74   | 8.73   | 8.76   | 8.79   | 8.82   | 8.81   | 8.81   | 8.82   | 8.82   | 8.82   | 8.83   | 8.83   | 8.83   | 8.83   | 8.83   | 8.83   | 0.9%      |
| Distillate Fuel   | 6.74  | 8.40  | 8.25  | 8.24  | 8.28  | 8.27  | 8.28   | 8.30   | 8.31   | 8.34   | 8.41   | 8.39   | 8.37   | 8.39   | 8.38   | 8.40   | 8.43   | 8.42   | 8.42   | 8.43   | 8.43   | 8.44   | 1.0%      |
| Jet Fuel  | 3.92  | 5.32  | 5.16  | 5.19  | 5.26  | 5.28  | 5.32   | 5.39   | 5.42   | 5.46   | 5.57   | 5.56   | 5.54   | 5.56   | 5.56   | 5.60   | 5.68   | 5.68   | 5.68   | 5.67   | 5.67   | 5.67   | 1.7%      |
| Liquefied Petroleum Gas   | 9.24  | 11.63 | 11.46 | 11.45 | 11.44 | 11.51 | 11.44  | 11.46  | 11.47  | 11.50  | 11.54  | 11.52  | 11.52  | 11.64  | 11.62  | 11.59  | 11.66  | 11.68  | 11.71  | 11.77  | 11.82  | 11.90  | 1.2%      |
| Motor Gasoline 8/   | 8.67  | 10.65 | 10.32 | 10.27 | 10.28 | 10.30 | 10.31  | 10.27  | 10.32  | 10.34  | 10.34  | 10.33  | 10.33  | 10.34  | 10.34  | 10.34  | 10.34  | 10.33  | 10.33  | 10.32  | 10.31  | 10.30  | 0.8%      |
| Residual Fuel   | 2.61  | 2.99  | 2.79  | 2.79  | 2.80  | 2.81  | 2.83   | 2.84   | 2.86   | 2.87   | 2.88   | 2.90   | 2.91   | 2.93   | 2.94   | 2.96   | 2.98   | 3.00   | 3.01   | 3.03   | 3.05   | 3.06   | 0.7%      |
| Natural Gas   | 4.38  | 4.56  | 4.58  | 4.57  | 4.57  | 4.62  | 4.62   | 4.65   | 4.63   | 4.60   | 4.57   | 4.54   | 4.52   | 4.51   | 4.49   | 4.47   | 4.43   | 4.42   | 4.38   | 4.36   | 4.37   | 4.40   | 0.0%      |
| Coal  | 1.32  | 1.29  | 1.24  | 1.22  | 1.19  | 1.17  | 1.15   | 1.15   | 1.15   | 1.15   | 1.11   | 1.13   | 1.12   | 1.11   | 1.10   | 1.08   | 1.08   | 1.06   | 1.06   | 1.05   | 1.04   | 1.03   | -1.1%     |
| Ethanol (E85) 11/   | 14.35 | 16.17 | 15.73 | 15.65 | 15.98 | 16.01 | 16.06  | 16.00  | 16.08  | 16.12  | 16.13  | 16.14  | 16.14  | 16.15  | 16.16  | 16.17  | 16.18  | 16.18  | 16.19  | 16.19  | 16.19  | 16.19  | 0.6%      |
| Methanol (M85) 12/  | 8.99  | 11.58 | 11.47 | 11.59 | 13.68 | 13.70 | 14.09  | 14.09  | 14.49  | 14.51  | 14.52  | 14.53  | 14.54  | 14.56  | 14.57  | 14.59  | 14.60  | 14.61  | 14.62  | 14.63  | 14.64  | 14.65  | 2.2%      |
| Electricity   | 18.41 | 17.96 | 17.70 | 17.29 | 16.94 | 16.76 | 16.43  | 16.39  | 16.31  | 16.25  | 15.84  | 15.82  | 15.62  | 15.52  | 15.54  | 15.55  | 15.78  | 15.60  | 15.72  | 15.65  | 15.46  | 15.36  | -0.8%     |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 22.72 | 24.09 | 24.00 | 23.90 | 23.92 | 24.16 | 24.11  | 24.29  | 24.43  | 24.69  | 24.50  | 24.67  | 24.67  | 24.83  | 24.92  | 25.08  | 25.38  | 25.43  | 25.62  | 25.72  | 25.77  | 25.95  | 0.6%      |
| Commercial  | 16.27 | 16.83 | 16.77 | 16.64 | 16.54 | 16.54 | 16.49  | 16.60  | 16.68  | 16.72  | 16.58  | 16.67  | 16.67  | 16.71  | 16.82  | 16.92  | 17.14  | 17.07  | 17.18  | 17.17  | 17.09  | 17.05  | 0.2%      |
| Industrial  | 18.34 | 20.13 | 19.93 | 20.00 | 20.29 | 20.61 | 20.90  | 21.26  | 21.59  | 21.82  | 21.72  | 21.90  | 21.88  | 22.11  | 22.44  | 22.81  | 23.38  | 23.40  | 23.74  | 23.97  | 24.19  | 24.55  | 1.3%      |
| Transportation  | 29.21 | 37.16 | 36.77 | 37.21 | 37.81 | 38.51 | 39.15  | 39.63  | 40.32  | 40.87  | 41.35  | 41.77  | 42.05  | 42.40  | 42.75  | 43.20  | 43.63  | 43.85  | 44.07  | 44.28  | 44.47  | 44.68  | 2.0%      |
| Total Non-Renewable Expend.   | 86.53 | 98.21 | 97.46 | 97.74 | 98.56 | 99.81 | 100.64 | 101.78 | 103.01 | 104.10 | 104.16 | 105.00 | 105.27 | 106.05 | 106.95 | 108.01 | 109.53 | 109.75 | 110.60 | 111.15 | 111.51 | 112.23 | 1.2%      |
| Trans. Renewable Expend.  | 0.01  | 0.02  | 0.03  | 0.04  | 0.06  | 0.07  | 0.08   | 0.10   | 0.11   | 0.12   | 0.14   | 0.15   | 0.16   | 0.16   | 0.17   | 0.18   | 0.19   | 0.19   | 0.19   | 0.20   | 0.20   | 0.20   | 16.5%     |
| Total Expenditures  | 86.54 | 98.24 | 97.49 | 97.79 | 98.61 | 99.88 | 100.73 | 101.88 | 103.12 | 104.22 | 104.30 | 105.15 | 105.43 | 106.22 | 107.12 | 108.19 | 109.71 | 109.94 | 110.79 | 111.34 | 111.71 | 112.42 | 1.2%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 14. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**04 - West North Central**

|                                | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |       |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
| <b>Residential</b>             | 11.24 | 11.12 | 11.08 | 11.02 | 11.02 | 11.06 | 10.94 | 10.99 | 11.02 | 11.08 | 11.07 | 11.10 | 11.02 | 10.95 | 10.95 | 10.95 | 10.99 | 10.98 | 10.99 | 10.99 | 10.98 | 10.97 | 10.97     | -0.1% |
| Primary Energy 1/              | 5.85  | 6.33  | 6.30  | 6.27  | 6.27  | 6.29  | 6.29  | 6.30  | 6.30  | 6.28  | 6.25  | 6.22  | 6.20  | 6.19  | 6.16  | 6.13  | 6.11  | 6.09  | 6.08  | 6.07  | 6.08  | 6.11  | 6.11      | 0.2%  |
| Petroleum Products 2/          | 6.55  | 8.65  | 8.48  | 8.47  | 8.48  | 8.53  | 8.50  | 8.53  | 8.54  | 8.59  | 8.64  | 8.63  | 8.63  | 8.72  | 8.71  | 8.70  | 8.76  | 8.78  | 8.82  | 8.88  | 8.94  | 9.02  | 9.02      | 1.5%  |
| Distillate Fuel                | 5.19  | 6.71  | 6.58  | 6.58  | 6.63  | 6.64  | 6.67  | 6.71  | 6.75  | 6.80  | 6.88  | 6.87  | 6.86  | 6.90  | 6.91  | 6.94  | 6.99  | 7.00  | 7.03  | 7.10  | 7.16  | 7.23  | 7.23      | 1.5%  |
| Liquefied Petroleum Gas        | 7.27  | 9.64  | 9.45  | 9.43  | 9.40  | 9.46  | 9.40  | 9.41  | 9.41  | 9.45  | 9.49  | 9.47  | 9.47  | 9.59  | 9.57  | 9.54  | 9.61  | 9.63  | 9.68  | 9.74  | 9.80  | 9.88  | 9.88      | 1.4%  |
| Natural Gas                    | 5.74  | 5.88  | 5.88  | 5.86  | 5.87  | 5.89  | 5.91  | 5.92  | 5.93  | 5.90  | 5.87  | 5.84  | 5.83  | 5.81  | 5.79  | 5.76  | 5.74  | 5.71  | 5.70  | 5.70  | 5.71  | 5.73  | 5.73      | 0.0%  |
| Electricity                    | 21.59 | 20.56 | 20.39 | 20.17 | 20.08 | 20.05 | 19.55 | 19.57 | 19.58 | 19.70 | 19.64 | 19.70 | 19.43 | 19.16 | 19.12 | 19.11 | 19.19 | 19.17 | 19.14 | 19.09 | 18.97 | 18.82 | 18.82     | -0.6% |
| <b>Commercial</b>              | 10.60 | 10.55 | 10.45 | 10.38 | 10.36 | 10.35 | 10.23 | 10.27 | 10.29 | 10.30 | 10.26 | 10.27 | 10.15 | 10.06 | 10.03 | 10.04 | 10.07 | 10.06 | 10.07 | 10.07 | 10.06 | 10.05 | 10.05     | -0.2% |
| Primary Energy 1/              | 4.67  | 5.06  | 5.04  | 5.04  | 5.05  | 5.08  | 5.11  | 5.13  | 5.15  | 5.14  | 5.13  | 5.11  | 5.11  | 5.11  | 5.10  | 5.08  | 5.07  | 5.06  | 5.06  | 5.07  | 5.10  | 5.13  | 5.13      | 0.4%  |
| Petroleum Products 2/          | 5.40  | 7.20  | 7.02  | 7.01  | 7.03  | 7.07  | 7.06  | 7.08  | 7.11  | 7.15  | 7.22  | 7.20  | 7.20  | 7.27  | 7.26  | 7.27  | 7.32  | 7.33  | 7.37  | 7.43  | 7.48  | 7.55  | 7.55      | 1.5%  |
| Distillate Fuel                | 3.76  | 5.02  | 4.88  | 4.88  | 4.93  | 4.95  | 4.97  | 5.01  | 5.05  | 5.10  | 5.18  | 5.18  | 5.17  | 5.20  | 5.22  | 5.25  | 5.29  | 5.31  | 5.34  | 5.41  | 5.47  | 5.54  | 5.54      | 1.8%  |
| Residual Fuel                  | 2.01  | 2.62  | 2.45  | 2.47  | 2.48  | 2.50  | 2.51  | 2.53  | 2.55  | 2.56  | 2.58  | 2.59  | 2.61  | 2.63  | 2.64  | 2.66  | 2.68  | 2.69  | 2.71  | 2.72  | 2.74  | 2.76  | 2.76      | 1.4%  |
| Natural Gas 3/                 | 4.71  | 4.96  | 4.96  | 4.96  | 4.98  | 5.00  | 5.04  | 5.06  | 5.08  | 5.07  | 5.05  | 5.03  | 5.03  | 5.02  | 5.01  | 4.99  | 4.98  | 4.97  | 4.96  | 4.97  | 4.99  | 5.03  | 5.03      | 0.3%  |
| Electricity                    | 19.92 | 19.17 | 18.86 | 18.61 | 18.48 | 18.37 | 17.92 | 17.93 | 17.93 | 17.93 | 17.82 | 17.84 | 17.50 | 17.23 | 17.16 | 17.16 | 17.26 | 17.24 | 17.24 | 17.21 | 17.13 | 17.03 | 17.03     | -0.7% |
| <b>Industrial 4/</b>           | 5.05  | 5.46  | 5.38  | 5.36  | 5.37  | 5.38  | 5.33  | 5.35  | 5.38  | 5.40  | 5.42  | 5.43  | 5.38  | 5.36  | 5.36  | 5.37  | 5.39  | 5.39  | 5.40  | 5.42  | 5.44  | 5.46  | 5.46      | 0.4%  |
| Primary Energy                 | 3.48  | 4.10  | 4.04  | 4.05  | 4.08  | 4.11  | 4.13  | 4.15  | 4.18  | 4.21  | 4.23  | 4.23  | 4.23  | 4.26  | 4.26  | 4.27  | 4.30  | 4.30  | 4.32  | 4.35  | 4.39  | 4.43  | 4.43      | 1.1%  |
| Petroleum Products 2/          | 4.85  | 5.97  | 5.81  | 5.79  | 5.81  | 5.83  | 5.81  | 5.83  | 5.86  | 5.90  | 5.95  | 5.93  | 5.93  | 5.97  | 5.97  | 5.98  | 6.02  | 6.03  | 6.05  | 6.10  | 6.14  | 6.19  | 6.19      | 1.1%  |
| Distillate Fuel                | 4.10  | 5.53  | 5.40  | 5.40  | 5.45  | 5.46  | 5.49  | 5.53  | 5.57  | 5.62  | 5.70  | 5.69  | 5.68  | 5.72  | 5.73  | 5.76  | 5.81  | 5.82  | 5.85  | 5.92  | 5.98  | 6.05  | 6.05      | 1.8%  |
| Liquefied Petroleum Gas        | 6.86  | 8.63  | 8.43  | 8.41  | 8.38  | 8.45  | 8.38  | 8.39  | 8.40  | 8.43  | 8.47  | 8.45  | 8.45  | 8.57  | 8.55  | 8.53  | 8.60  | 8.62  | 8.66  | 8.72  | 8.78  | 8.86  | 8.86      | 1.2%  |
| Residual Fuel                  | 2.31  | 2.65  | 2.48  | 2.49  | 2.51  | 2.52  | 2.54  | 2.56  | 2.57  | 2.59  | 2.61  | 2.62  | 2.64  | 2.65  | 2.67  | 2.69  | 2.70  | 2.72  | 2.73  | 2.75  | 2.77  | 2.78  | 2.78      | 0.9%  |
| Natural Gas 5/                 | 2.88  | 3.09  | 3.13  | 3.17  | 3.23  | 3.29  | 3.36  | 3.40  | 3.44  | 3.45  | 3.45  | 3.45  | 3.46  | 3.46  | 3.46  | 3.46  | 3.46  | 3.47  | 3.47  | 3.49  | 3.52  | 3.57  | 3.57      | 1.0%  |
| Metallurgical Coal             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Steam Coal                     | 1.09  | 1.06  | 1.04  | 1.03  | 1.02  | 1.01  | 1.00  | 0.99  | 0.98  | 0.98  | 0.97  | 0.95  | 0.93  | 0.92  | 0.91  | 0.91  | 0.90  | 0.89  | 0.88  | 0.87  | 0.86  | 0.85  | 0.85      | -1.1% |
| Electricity                    | 12.35 | 11.96 | 11.83 | 11.66 | 11.55 | 11.43 | 11.06 | 11.06 | 11.06 | 11.07 | 11.05 | 11.09 | 10.77 | 10.54 | 10.50 | 10.47 | 10.46 | 10.41 | 10.38 | 10.32 | 10.24 | 10.15 | 10.15     | -0.9% |
| <b>Transportation</b>          | 7.70  | 9.45  | 9.17  | 9.13  | 9.14  | 9.15  | 9.17  | 9.15  | 9.18  | 9.20  | 9.23  | 9.22  | 9.22  | 9.23  | 9.23  | 9.23  | 9.24  | 9.24  | 9.23  | 9.22  | 9.21  | 9.20  | 9.20      | 0.8%  |
| Primary Energy                 | 7.68  | 9.43  | 9.16  | 9.11  | 9.13  | 9.13  | 9.15  | 9.13  | 9.17  | 9.19  | 9.22  | 9.21  | 9.20  | 9.21  | 9.21  | 9.22  | 9.23  | 9.22  | 9.22  | 9.21  | 9.20  | 9.19  | 9.19      | 0.8%  |
| Petroleum Products 2/          | 7.68  | 9.44  | 9.16  | 9.12  | 9.14  | 9.14  | 9.16  | 9.14  | 9.17  | 9.20  | 9.22  | 9.21  | 9.21  | 9.22  | 9.22  | 9.22  | 9.24  | 9.23  | 9.22  | 9.22  | 9.21  | 9.20  | 9.20      | 0.8%  |
| Distillate Fuel 6/             | 7.36  | 8.92  | 8.75  | 8.73  | 8.76  | 8.75  | 8.76  | 8.78  | 8.78  | 8.80  | 8.88  | 8.87  | 8.86  | 8.88  | 8.89  | 8.92  | 8.95  | 8.94  | 8.94  | 8.94  | 8.93  | 8.93  | 8.93      | 0.9%  |
| Jet Fuel 7/                    | 4.37  | 5.56  | 5.40  | 5.42  | 5.50  | 5.51  | 5.55  | 5.62  | 5.65  | 5.69  | 5.80  | 5.79  | 5.78  | 5.80  | 5.81  | 5.84  | 5.93  | 5.94  | 5.93  | 5.93  | 5.93  | 5.93  | 5.93      | 1.4%  |
| Motor Gasoline 8/              | 8.33  | 10.27 | 9.93  | 9.87  | 9.88  | 9.90  | 9.92  | 9.88  | 9.93  | 9.95  | 9.95  | 9.95  | 9.95  | 9.95  | 9.95  | 9.95  | 9.95  | 9.95  | 9.95  | 9.94  | 9.94  | 9.93  | 9.93      | 0.8%  |
| Residual Fuel                  | 1.67  | 1.98  | 1.80  | 1.81  | 1.83  | 1.84  | 1.86  | 1.88  | 1.89  | 1.91  | 1.93  | 1.94  | 1.96  | 1.97  | 1.99  | 2.01  | 2.03  | 2.04  | 2.06  | 2.07  | 2.09  | 2.11  | 2.11      | 1.1%  |
| Liquid Petroleum Gas 9/        | 10.17 | 12.85 | 12.62 | 12.58 | 12.52 | 12.56 | 12.46 | 12.44 | 12.42 | 12.42 | 12.43 | 12.39 | 12.36 | 12.46 | 12.41 | 12.36 | 12.40 | 12.39 | 12.40 | 12.44 | 12.46 | 12.50 | 12.50     | 0.9%  |
| Natural Gas 10/                | 5.03  | 5.56  | 5.52  | 5.51  | 5.59  | 5.71  | 5.88  | 6.06  | 6.25  | 6.39  | 6.50  | 6.59  | 6.68  | 6.76  | 6.80  | 6.83  | 6.85  | 6.86  | 6.86  | 6.87  | 6.89  | 6.93  | 6.93      | 1.5%  |
| Ethanol (E85) 11/              | 14.35 | 16.86 | 16.40 | 16.33 | 16.35 | 16.39 | 16.44 | 16.37 | 16.46 | 16.50 | 16.51 | 16.52 | 16.52 | 16.54 | 16.54 | 16.55 | 16.56 | 16.56 | 16.57 | 16.57 | 16.58 | 16.57 | 16.57     | 0.7%  |
| Methanol (M85) 12/             | 8.99  | 11.17 | 11.06 | 11.17 | 13.26 | 13.28 | 13.67 | 13.67 | 14.07 | 14.09 | 14.10 | 14.12 | 14.13 | 14.14 | 14.16 | 14.17 | 14.19 | 14.20 | 14.21 | 14.22 | 14.23 | 14.23 | 14.23     | 2.1%  |
| Electricity                    | 15.65 | 15.11 | 14.84 | 14.63 | 14.45 | 14.19 | 13.91 | 13.80 | 13.75 | 13.62 | 13.56 | 13.53 | 13.16 | 12.94 | 12.80 | 12.67 | 12.51 | 12.43 | 12.35 | 12.27 | 12.14 | 11.99 | 11.99     | -1.2% |
| <b>Average End-Use Energy</b>  | 7.87  | 8.68  | 8.53  | 8.49  | 8.48  | 8.49  | 8.43  | 8.44  | 8.47  | 8.50  | 8.51  | 8.52  | 8.47  | 8.45  | 8.44  | 8.44  | 8.46  | 8.46  | 8.46  | 8.46  | 8.45  | 8.45  | 8.45      | 0.3%  |
| Primary Energy                 | 7.65  | 8.60  | 8.43  | 8.38  | 8.38  | 8.39  | 8.34  | 8.35  | 8.37  | 8.40  | 8.42  | 8.42  | 8.38  | 8.37  | 8.36  | 8.36  | 8.37  | 8.37  | 8.37  | 8.37  | 8.36  | 8.36  | 8.36      | 0.4%  |
| Electricity                    | 17.99 | 17.36 | 17.17 | 16.95 | 16.82 | 16.72 | 16.27 | 16.28 | 16.27 | 16.32 | 16.26 | 16.31 | 16.00 | 15.75 | 15.69 | 15.67 | 15.72 | 15.69 | 15.66 | 15.61 | 15.51 | 15.39 | 15.39     | -0.7% |
| <b>Electric Generators 13/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Fossil Fuel Average            | 0.95  | 0.96  | 0.96  | 0.94  | 0.93  | 0.93  | 0.92  | 0.93  | 0.93  | 0.93  | 0.92  | 0.93  | 0.94  | 0.95  | 0.95  | 0.96  | 1.00  | 1.00  | 1.00  | 1.00  | 0.99  | 0.99  | 0.99      | 0.2%  |
| Petroleum Products             | 2.37  | 3.67  | 3.32  | 3.52  | 3.59  | 3.73  | 3.70  | 3.54  | 3.61  | 3.50  | 3.72  | 3.72  | 3.82  | 3.95  | 3.90  | 3.85  | 3.88  | 3.88  | 3.97  | 4.01  | 4.12  | 4.15  | 4.15      | 2.6%  |
| Distillate Fuel                | 3.30  | 4.85  | 4.72  | 4.72  | 4.77  | 4.79  | 4.81  | 4.85  | 4.89  | 4.94  | 5.02  | 5.01  | 5.01  | 5.04  | 5.06  | 5.08  | 5.13  | 5.14  | 5.18  | 5.25  | 5.30  | 5.37  | 5.37      | 2.2%  |
| Residual Fuel                  | 1.82  | 2.39  | 2.21  | 2.23  | 2.24  | 2.26  | 2.27  | 2.29  | 2.31  | 2.32  | 2.34  | 2.35  | 2.37  | 2.39  | 2.40  | 2.42  | 2.44  | 2.45  | 2.47  | 2.48  | 2.50  | 2.52  | 2.52      | 1.5%  |
| Natural Gas                    | 2.16  | 2.46  | 2.46  | 2.49  | 2.55  | 2.73  | 2.84  | 2.95  | 2.99  | 3.05  | 3.09  | 3.12  | 3.15  | 3.18  | 3.17  | 3.17  | 3.15  | 3.17  | 3.17  | 3.19  | 3.23  | 3.28  | 3.28      | 1.9%  |
| Steam Coal                     | 0.90  | 0.91  | 0.93  | 0.92  | 0.90  | 0.89  | 0.88  | 0.87  | 0.87  | 0.86  | 0.85  | 0.84  | 0.83  | 0.82  | 0.82  | 0.81  | 0.80  | 0.80  | 0.79  | 0.78  | 0.77  | 0.76  | 0.76      | -0.7% |

**Table 14. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**04 - West North Central**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Average Price to All Users 14/  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Petroleum Products 2/   | 7.00  | 8.63  | 8.39  | 8.36  | 8.38  | 8.40  | 8.40  | 8.40  | 8.43  | 8.45  | 8.49  | 8.48  | 8.48  | 8.50  | 8.50  | 8.50  | 8.52  | 8.51  | 8.52  | 8.52  | 8.52  | 8.53  | 0.9%      |
| Distillate Fuel   | 6.37  | 7.90  | 7.74  | 7.73  | 7.77  | 7.76  | 7.77  | 7.80  | 7.81  | 7.84  | 7.92  | 7.91  | 7.89  | 7.92  | 7.92  | 7.95  | 7.98  | 7.97  | 7.98  | 8.00  | 8.00  | 8.02  | 1.1%      |
| Jet Fuel  | 4.37  | 5.56  | 5.40  | 5.42  | 5.50  | 5.51  | 5.55  | 5.62  | 5.65  | 5.69  | 5.80  | 5.79  | 5.78  | 5.80  | 5.81  | 5.84  | 5.93  | 5.94  | 5.93  | 5.93  | 5.93  | 5.93  | 1.4%      |
| Liquefied Petroleum Gas   | 7.11  | 9.19  | 9.00  | 8.99  | 8.96  | 9.03  | 8.96  | 8.98  | 8.98  | 9.01  | 9.05  | 9.03  | 9.03  | 9.15  | 9.12  | 9.09  | 9.16  | 9.18  | 9.22  | 9.28  | 9.28  | 9.33  | 1.3%      |
| Motor Gasoline 8/   | 8.33  | 10.27 | 9.93  | 9.87  | 9.88  | 9.90  | 9.92  | 9.88  | 9.93  | 9.95  | 9.95  | 9.95  | 9.95  | 9.95  | 9.95  | 9.96  | 9.95  | 9.95  | 9.95  | 9.95  | 9.94  | 9.94  | 0.8%      |
| Residual Fuel   | 1.99  | 2.52  | 2.34  | 2.38  | 2.40  | 2.43  | 2.44  | 2.44  | 2.46  | 2.46  | 2.50  | 2.52  | 2.53  | 2.56  | 2.57  | 2.58  | 2.59  | 2.61  | 2.64  | 2.65  | 2.68  | 2.69  | 1.4%      |
| Natural Gas   | 4.30  | 4.57  | 4.62  | 4.64  | 4.66  | 4.68  | 4.70  | 4.71  | 4.72  | 4.70  | 4.68  | 4.65  | 4.63  | 4.62  | 4.59  | 4.56  | 4.50  | 4.48  | 4.48  | 4.48  | 4.50  | 4.54  | 0.2%      |
| Coal  | 0.92  | 0.93  | 0.94  | 0.93  | 0.92  | 0.91  | 0.90  | 0.89  | 0.88  | 0.87  | 0.86  | 0.85  | 0.84  | 0.83  | 0.83  | 0.82  | 0.81  | 0.81  | 0.80  | 0.79  | 0.78  | 0.77  | -0.8%     |
| Ethanol (E85) 11/   | 14.35 | 16.86 | 16.40 | 16.33 | 16.35 | 16.39 | 16.44 | 16.37 | 16.46 | 16.50 | 16.51 | 16.52 | 16.52 | 16.54 | 16.54 | 16.55 | 16.56 | 16.56 | 16.57 | 16.57 | 16.58 | 16.57 | 0.7%      |
| Methanol (M85) 12/  | 8.99  | 11.17 | 11.06 | 11.17 | 13.26 | 13.28 | 13.67 | 13.67 | 14.07 | 14.09 | 14.10 | 14.12 | 14.13 | 14.14 | 14.16 | 14.17 | 14.19 | 14.20 | 14.21 | 14.22 | 14.23 | 14.23 | 2.1%      |
| Electricity   | 17.99 | 17.36 | 17.17 | 16.95 | 16.82 | 16.72 | 16.27 | 16.28 | 16.27 | 16.32 | 16.26 | 16.31 | 16.00 | 15.75 | 15.69 | 15.67 | 15.72 | 15.69 | 15.66 | 15.61 | 15.51 | 15.39 | -0.7%     |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Residential   | 9.41  | 10.04 | 10.01 | 9.99  | 10.02 | 10.12 | 10.02 | 10.10 | 10.16 | 10.28 | 10.29 | 10.37 | 10.35 | 10.37 | 10.40 | 10.46 | 10.55 | 10.63 | 10.66 | 10.72 | 10.77 | 10.85 | 0.6%      |
| Commercial  | 6.67  | 6.98  | 6.99  | 7.00  | 7.04  | 7.08  | 7.07  | 7.15  | 7.22  | 7.30  | 7.34  | 7.41  | 7.40  | 7.41  | 7.44  | 7.49  | 7.55  | 7.57  | 7.60  | 7.61  | 7.60  | 7.59  | 0.6%      |
| Industrial  | 7.04  | 7.65  | 7.58  | 7.66  | 7.82  | 7.97  | 8.03  | 8.16  | 8.28  | 8.39  | 8.47  | 8.55  | 8.51  | 8.57  | 8.68  | 8.80  | 8.94  | 8.99  | 9.08  | 9.20  | 9.33  | 9.47  | 1.4%      |
| Transportation  | 14.81 | 18.87 | 18.67 | 18.92 | 19.27 | 19.64 | 20.00 | 20.26 | 20.64 | 20.96 | 21.27 | 21.52 | 21.71 | 21.94 | 22.17 | 22.44 | 22.71 | 22.86 | 23.01 | 23.16 | 23.28 | 23.42 | 2.1%      |
| Total Non-Renewable Expend.   | 37.93 | 43.54 | 43.25 | 43.58 | 44.16 | 44.81 | 45.12 | 45.67 | 46.30 | 46.92 | 47.37 | 47.86 | 47.98 | 48.29 | 48.68 | 49.20 | 49.75 | 50.05 | 50.35 | 50.68 | 50.98 | 51.34 | 1.4%      |
| Trans. Renewable Expend.  | 0.00  | 0.01  | 0.01  | 0.02  | 0.02  | 0.03  | 0.04  | 0.04  | 0.05  | 0.05  | 0.06  | 0.06  | 0.07  | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 16.9%     |
| Total Expenditures  | 37.93 | 43.55 | 43.26 | 43.60 | 44.18 | 44.85 | 45.16 | 45.71 | 46.35 | 46.98 | 47.43 | 47.92 | 48.05 | 48.36 | 48.76 | 49.28 | 49.84 | 50.14 | 50.43 | 50.77 | 51.07 | 51.42 | 1.4%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 15. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**05 - South Atlantic**

|                         | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |      |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------|
| Residential             | 16.47 | 16.66 | 16.44 | 16.26 | 16.11 | 16.04 | 15.98 | 16.00 | 16.03 | 15.97 | 15.88 | 15.90 | 15.81 | 15.76 | 15.77 | 15.88 | 15.88 | 15.87 | 15.85 | 15.87 | 15.83 | 15.79 | -0.2%     |      |
| Primary Energy 1/       | 8.04  | 8.78  | 8.63  | 8.54  | 8.47  | 8.43  | 8.38  | 8.36  | 8.33  | 8.29  | 8.24  | 8.17  | 8.11  | 8.08  | 8.03  | 7.98  | 7.95  | 7.90  | 7.87  | 7.83  | 7.80  | 7.79  | -0.1%     |      |
| Petroleum Products 2/   | 8.59  | 10.84 | 10.72 | 10.73 | 10.78 | 10.84 | 10.85 | 10.90 | 10.94 | 11.00 | 11.08 | 11.08 | 11.08 | 11.16 | 11.16 | 11.17 | 11.23 | 11.25 | 11.28 | 11.36 | 11.42 | 11.50 | 1.3%      |      |
| Distillate Fuel         | 6.18  | 7.66  | 7.54  | 7.53  | 7.58  | 7.60  | 7.62  | 7.66  | 7.70  | 7.75  | 7.83  | 7.83  | 7.82  | 7.86  | 7.88  | 7.92  | 7.96  | 7.98  | 8.00  | 8.09  | 8.15  | 8.22  | 1.3%      |      |
| Liquefied Petroleum Gas | 12.26 | 15.19 | 14.99 | 14.97 | 14.94 | 15.01 | 14.94 | 14.95 | 14.96 | 14.99 | 15.03 | 15.01 | 15.01 | 15.13 | 15.11 | 15.09 | 15.16 | 15.18 | 15.22 | 15.28 | 15.34 | 15.42 | 1.0%      |      |
| Natural Gas             | 7.86  | 7.86  | 7.73  | 7.61  | 7.51  | 7.45  | 7.41  | 7.39  | 7.37  | 7.32  | 7.25  | 7.18  | 7.13  | 7.08  | 7.03  | 6.99  | 6.96  | 6.91  | 6.88  | 6.84  | 6.80  | 6.79  | -0.7%     |      |
| Electricity             | 22.00 | 21.91 | 21.61 | 21.33 | 21.09 | 20.97 | 20.89 | 20.94 | 20.98 | 20.90 | 20.77 | 20.84 | 20.70 | 20.64 | 20.66 | 20.85 | 20.85 | 20.87 | 20.83 | 20.88 | 20.83 | 20.76 | -0.3%     |      |
| Commercial              | 14.23 | 14.37 | 14.11 | 13.87 | 13.69 | 13.55 | 13.44 | 13.47 | 13.50 | 13.43 | 13.32 | 13.34 | 13.21 | 13.13 | 13.13 | 13.18 | 13.18 | 13.17 | 13.15 | 13.17 | 13.10 | 13.11 | -0.4%     |      |
| Primary Energy 1/       | 5.75  | 6.26  | 6.15  | 6.09  | 6.06  | 6.05  | 6.06  | 6.08  | 6.10  | 6.11  | 6.10  | 6.08  | 6.07  | 6.07  | 6.06  | 6.05  | 6.06  | 6.05  | 6.05  | 6.05  | 6.06  | 6.08  | 0.3%      |      |
| Petroleum Products 2/   | 4.66  | 6.32  | 6.17  | 6.15  | 6.19  | 6.21  | 6.22  | 6.25  | 6.28  | 6.33  | 6.41  | 6.41  | 6.41  | 6.47  | 6.49  | 6.51  | 6.57  | 6.59  | 6.62  | 6.70  | 6.76  | 6.84  | 1.8%      |      |
| Distillate Fuel         | 3.73  | 5.11  | 4.99  | 4.98  | 5.03  | 5.05  | 5.07  | 5.11  | 5.15  | 5.20  | 5.28  | 5.28  | 5.27  | 5.31  | 5.33  | 5.37  | 5.41  | 5.43  | 5.45  | 5.54  | 5.60  | 5.67  | 1.9%      |      |
| Residual Fuel           | 2.41  | 3.30  | 3.12  | 3.12  | 3.12  | 3.13  | 3.14  | 3.16  | 3.17  | 3.18  | 3.20  | 3.21  | 3.21  | 3.23  | 3.24  | 3.26  | 3.28  | 3.30  | 3.31  | 3.32  | 3.34  | 3.35  | 1.5%      |      |
| Natural Gas 3/          | 6.28  | 6.45  | 6.35  | 6.28  | 6.22  | 6.20  | 6.21  | 6.23  | 6.26  | 6.26  | 6.22  | 6.19  | 6.18  | 6.16  | 6.14  | 6.13  | 6.13  | 6.11  | 6.10  | 6.09  | 6.08  | 6.09  | -0.1%     |      |
| Electricity             | 18.86 | 18.76 | 18.42 | 18.08 | 17.80 | 17.58 | 17.40 | 17.41 | 17.44 | 17.31 | 17.13 | 17.18 | 16.98 | 16.85 | 16.84 | 16.93 | 16.92 | 16.91 | 16.86 | 16.90 | 16.79 | 16.78 | -0.5%     |      |
| Industrial 4/           | 5.15  | 5.81  | 5.69  | 5.63  | 5.59  | 5.56  | 5.55  | 5.57  | 5.61  | 5.62  | 5.61  | 5.64  | 5.62  | 5.64  | 5.65  | 5.70  | 5.73  | 5.74  | 5.75  | 5.78  | 5.80  | 5.83  | 0.6%      |      |
| Primary Energy          | 2.95  | 3.81  | 3.73  | 3.72  | 3.73  | 3.75  | 3.78  | 3.82  | 3.85  | 3.89  | 3.91  | 3.92  | 3.93  | 3.96  | 3.98  | 4.00  | 4.04  | 4.05  | 4.07  | 4.09  | 4.12  | 4.15  | 1.6%      |      |
| Petroleum Products 2/   | 3.69  | 5.43  | 5.28  | 5.26  | 5.28  | 5.29  | 5.29  | 5.31  | 5.32  | 5.35  | 5.39  | 5.38  | 5.38  | 5.43  | 5.43  | 5.45  | 5.49  | 5.50  | 5.52  | 5.55  | 5.58  | 5.62  | 1.9%      |      |
| Distillate Fuel         | 3.93  | 5.36  | 5.25  | 5.24  | 5.29  | 5.31  | 5.33  | 5.37  | 5.40  | 5.45  | 5.54  | 5.54  | 5.53  | 5.57  | 5.59  | 5.62  | 5.67  | 5.68  | 5.71  | 5.80  | 5.86  | 5.93  | 1.9%      |      |
| Liquefied Petroleum Gas | 7.92  | 11.55 | 11.35 | 11.33 | 11.31 | 11.37 | 11.30 | 11.32 | 11.32 | 11.36 | 11.39 | 11.37 | 11.38 | 11.50 | 11.48 | 11.45 | 11.52 | 11.54 | 11.58 | 11.65 | 11.71 | 11.79 | 1.8%      |      |
| Residual Fuel           | 2.45  | 3.26  | 3.08  | 3.08  | 3.08  | 3.09  | 3.10  | 3.12  | 3.13  | 3.14  | 3.15  | 3.16  | 3.17  | 3.19  | 3.20  | 3.22  | 3.24  | 3.25  | 3.27  | 3.28  | 3.30  | 3.31  | 1.4%      |      |
| Natural Gas 5/          | 2.72  | 2.94  | 2.89  | 2.89  | 2.90  | 2.94  | 3.02  | 3.09  | 3.15  | 3.20  | 3.21  | 3.22  | 3.24  | 3.26  | 3.28  | 3.30  | 3.34  | 3.36  | 3.38  | 3.39  | 3.41  | 3.44  | 1.1%      |      |
| Metallurgical Coal      | 1.46  | 1.47  | 1.45  | 1.44  | 1.42  | 1.40  | 1.39  | 1.38  | 1.37  | 1.37  | 1.35  | 1.35  | 1.34  | 1.33  | 1.32  | 1.32  | 1.32  | 1.30  | 1.30  | 1.29  | 1.28  | 1.28  | -0.6%     |      |
| Steam Coal              | 1.71  | 1.67  | 1.64  | 1.62  | 1.61  | 1.59  | 1.57  | 1.57  | 1.55  | 1.54  | 1.53  | 1.51  | 1.50  | 1.48  | 1.47  | 1.46  | 1.45  | 1.43  | 1.42  | 1.41  | 1.40  | 1.39  | -0.9%     |      |
| Electricity             | 12.97 | 12.90 | 12.66 | 12.38 | 12.10 | 11.87 | 11.69 | 11.65 | 11.64 | 11.53 | 11.40 | 11.49 | 11.32 | 11.21 | 11.19 | 11.30 | 11.29 | 11.24 | 11.22 | 11.24 | 11.18 | 11.19 | -0.7%     |      |
| Transportation          | 7.38  | 9.18  | 8.91  | 8.87  | 8.88  | 8.89  | 8.91  | 8.89  | 8.92  | 8.94  | 8.96  | 8.96  | 8.96  | 8.97  | 8.97  | 8.97  | 8.98  | 8.97  | 8.97  | 8.96  | 8.95  | 8.94  | 0.9%      |      |
| Primary Energy          | 7.36  | 9.17  | 8.90  | 8.85  | 8.87  | 8.88  | 8.89  | 8.87  | 8.91  | 8.93  | 8.95  | 8.94  | 8.94  | 8.95  | 8.95  | 8.96  | 8.97  | 8.96  | 8.95  | 8.95  | 8.95  | 8.94  | 8.93      | 0.9% |
| Petroleum Products 2/   | 7.36  | 9.17  | 8.90  | 8.86  | 8.87  | 8.88  | 8.90  | 8.87  | 8.91  | 8.93  | 8.95  | 8.94  | 8.94  | 8.95  | 8.95  | 8.95  | 8.96  | 8.95  | 8.95  | 8.94  | 8.93  | 8.92  | 0.9%      |      |
| Distillate Fuel 6/      | 7.23  | 8.80  | 8.63  | 8.61  | 8.64  | 8.63  | 8.64  | 8.66  | 8.66  | 8.68  | 8.76  | 8.75  | 8.73  | 8.76  | 8.76  | 8.79  | 8.81  | 8.80  | 8.79  | 8.81  | 8.79  | 8.79  | 0.9%      |      |
| Jet Fuel 7/             | 4.25  | 5.33  | 5.17  | 5.18  | 5.27  | 5.28  | 5.32  | 5.39  | 5.42  | 5.46  | 5.57  | 5.59  | 5.60  | 5.64  | 5.67  | 5.72  | 5.82  | 5.84  | 5.84  | 5.86  | 5.88  | 5.88  | 1.5%      |      |
| Motor Gasoline 8/       | 8.00  | 10.03 | 9.71  | 9.65  | 9.66  | 9.68  | 9.70  | 9.65  | 9.71  | 9.73  | 9.72  | 9.72  | 9.72  | 9.73  | 9.72  | 9.72  | 9.72  | 9.72  | 9.71  | 9.70  | 9.70  | 9.69  | 0.9%      |      |
| Residual Fuel           | 1.90  | 2.97  | 2.79  | 2.78  | 2.77  | 2.77  | 2.78  | 2.81  | 2.82  | 2.83  | 2.84  | 2.85  | 2.85  | 2.87  | 2.88  | 2.90  | 2.92  | 2.93  | 2.95  | 2.96  | 2.98  | 2.99  | 2.1%      |      |
| Liquid Petroleum Gas 9/ | 10.67 | 14.84 | 14.61 | 14.56 | 14.51 | 14.55 | 14.45 | 14.43 | 14.41 | 14.41 | 14.42 | 14.37 | 14.35 | 14.45 | 14.40 | 14.35 | 14.39 | 14.38 | 14.39 | 14.43 | 14.45 | 14.49 | 1.4%      |      |
| Natural Gas 10/         | 5.59  | 6.06  | 5.94  | 5.91  | 5.93  | 6.02  | 6.17  | 6.35  | 6.54  | 6.70  | 6.79  | 6.89  | 6.98  | 7.05  | 7.11  | 7.17  | 7.21  | 7.23  | 7.25  | 7.25  | 7.25  | 7.27  | 1.2%      |      |
| Ethanol (E85) 11/       | 14.35 | 18.21 | 17.65 | 17.58 | 17.92 | 17.96 | 18.02 | 17.97 | 18.07 | 18.12 | 18.14 | 18.16 | 18.18 | 18.20 | 18.22 | 18.24 | 18.26 | 18.27 | 18.29 | 18.31 | 18.32 | 18.33 | 1.1%      |      |
| Methanol (M85) 12/      | 8.99  | 10.79 | 10.69 | 10.80 | 12.89 | 12.91 | 13.30 | 13.30 | 13.70 | 13.72 | 13.73 | 13.74 | 13.76 | 13.77 | 13.79 | 13.80 | 13.82 | 13.82 | 13.84 | 13.84 | 13.85 | 13.86 | 2.0%      |      |
| Electricity             | 14.02 | 13.97 | 13.78 | 13.60 | 13.46 | 13.29 | 13.08 | 12.97 | 12.89 | 12.78 | 12.67 | 12.66 | 12.47 | 12.36 | 12.31 | 12.27 | 12.18 | 12.15 | 12.07 | 12.07 | 12.01 | 11.92 | -0.7%     |      |
| Average End-Use Energy  | 9.11  | 10.21 | 10.00 | 9.91  | 9.85  | 9.82  | 9.80  | 9.80  | 9.84  | 9.85  | 9.83  | 9.85  | 9.82  | 9.81  | 9.81  | 9.85  | 9.86  | 9.86  | 9.84  | 9.85  | 9.83  | 9.83  | 0.3%      |      |
| Primary Energy          | 7.94  | 9.26  | 9.04  | 8.97  | 8.95  | 8.93  | 8.93  | 8.92  | 8.96  | 8.98  | 8.98  | 9.00  | 8.98  | 8.99  | 8.99  | 9.01  | 9.03  | 9.03  | 9.02  | 9.03  | 9.02  | 9.01  | 0.6%      |      |
| Electricity             | 18.69 | 18.66 | 18.38 | 18.08 | 17.81 | 17.64 | 17.48 | 17.50 | 17.53 | 17.44 | 17.29 | 17.36 | 17.20 | 17.10 | 17.09 | 17.22 | 17.21 | 17.21 | 17.17 | 17.20 | 17.13 | 17.10 | -0.4%     |      |
| Electric Generators 13/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Fossil Fuel Average     | 1.63  | 1.66  | 1.54  | 1.49  | 1.43  | 1.42  | 1.43  | 1.45  | 1.46  | 1.46  | 1.44  | 1.47  | 1.48  | 1.49  | 1.51  | 1.52  | 1.54  | 1.54  | 1.54  | 1.53  | 1.53  | 1.53  | -0.3%     |      |
| Petroleum Products      | 2.20  | 3.12  | 2.93  | 2.92  | 2.94  | 2.93  | 2.95  | 2.95  | 2.96  | 2.98  | 2.98  | 3.01  | 3.03  | 3.05  | 3.07  | 3.09  | 3.14  | 3.13  | 3.15  | 3.21  | 3.23  | 3.25  | 1.8%      |      |
| Distillate Fuel         | 3.19  | 4.74  | 4.62  | 4.61  | 4.67  | 4.68  | 4.70  | 4.74  | 4.78  | 4.83  | 4.91  | 4.91  | 4.91  | 4.95  | 4.97  | 5.00  | 5.05  | 5.06  | 5.09  | 5.17  | 5.23  | 5.31  | 2.3%      |      |
| Residual Fuel           | 2.16  | 3.04  | 2.86  | 2.86  | 2.86  | 2.86  | 2.87  | 2.89  | 2.91  | 2.92  | 2.93  | 2.94  | 2.95  | 2.96  | 2.98  | 3.00  | 3.02  | 3.03  | 3.04  | 3.06  | 3.07  | 3.09  | 1.6%      |      |
| Natural Gas             | 2.44  | 2.64  | 2.52  | 2.55  | 2.51  | 2.53  | 2.59  | 2.68  | 2.73  | 2.81  | 2.83  | 2.86  | 2.92  | 2.97  | 3.03  | 3.10  | 3.15  | 3.18  | 3.23  | 3.25  | 3.27  | 3.30  | 1.4%      |      |
| Steam Coal              | 1.46  | 1.43  | 1.33  | 1.30  | 1.25  | 1.25  | 1.24  | 1.25  | 1.24  | 1.23  | 1.21  | 1.22  | 1.23  | 1.22  | 1.21  | 1.20  | 1.21  | 1.19  | 1.18  | 1.16  | 1.16  | 1.16  | -1.1%     |      |

**Table 15. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**05 - South Atlantic**

|   | 1998  | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Average Price to All Users 14/  |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Petroleum Products 2/   | 6.41  | 8.32   | 8.10   | 8.11   | 8.17   | 8.22   | 8.23   | 8.21   | 8.25   | 8.29   | 8.33   | 8.34   | 8.35   | 8.38   | 8.38   | 8.38   | 8.39   | 8.40   | 8.41   | 8.41   | 8.41   | 8.42   | 1.2%      |
| Distillate Fuel   | 6.43  | 8.00   | 7.86   | 7.85   | 7.89   | 7.89   | 7.90   | 7.93   | 7.95   | 7.97   | 8.06   | 8.05   | 8.04   | 8.07   | 8.08   | 8.11   | 8.14   | 8.14   | 8.14   | 8.17   | 8.18   | 8.20   | 1.1%      |
| Jet Fuel  | 4.25  | 5.33   | 5.17   | 5.18   | 5.27   | 5.28   | 5.32   | 5.39   | 5.42   | 5.46   | 5.57   | 5.59   | 5.60   | 5.64   | 5.67   | 5.72   | 5.82   | 5.84   | 5.84   | 5.86   | 5.88   | 5.88   | 1.5%      |
| Liquefied Petroleum Gas   | 10.32 | 13.56  | 13.36  | 13.35  | 13.32  | 13.38  | 13.31  | 13.32  | 13.32  | 13.34  | 13.37  | 13.34  | 13.33  | 13.44  | 13.40  | 13.36  | 13.42  | 13.43  | 13.46  | 13.51  | 13.55  | 13.62  | 1.3%      |
| Motor Gasoline 8/   | 8.00  | 10.03  | 9.71   | 9.65   | 9.66   | 9.68   | 9.70   | 9.65   | 9.71   | 9.73   | 9.72   | 9.72   | 9.72   | 9.73   | 9.72   | 9.72   | 9.72   | 9.72   | 9.71   | 9.70   | 9.70   | 9.69   | 0.9%      |
| Residual Fuel   | 2.17  | 3.07   | 2.89   | 2.90   | 2.90   | 2.90   | 2.91   | 2.93   | 2.95   | 2.96   | 2.97   | 2.98   | 2.99   | 3.01   | 3.02   | 3.04   | 3.06   | 3.07   | 3.08   | 3.10   | 3.11   | 3.13   | 1.7%      |
| Natural Gas   | 4.37  | 4.56   | 4.57   | 4.56   | 4.51   | 4.50   | 4.50   | 4.52   | 4.53   | 4.57   | 4.57   | 4.55   | 4.55   | 4.54   | 4.53   | 4.53   | 4.55   | 4.55   | 4.55   | 4.55   | 4.55   | 4.57   | 0.2%      |
| Coal  | 1.48  | 1.45   | 1.36   | 1.32   | 1.28   | 1.27   | 1.27   | 1.27   | 1.26   | 1.25   | 1.23   | 1.24   | 1.24   | 1.23   | 1.23   | 1.22   | 1.22   | 1.21   | 1.20   | 1.18   | 1.17   | 1.17   | -1.1%     |
| Ethanol (E85) 11/   | 14.35 | 18.21  | 17.65  | 17.58  | 17.92  | 17.96  | 18.02  | 17.97  | 18.07  | 18.12  | 18.14  | 18.16  | 18.18  | 18.20  | 18.22  | 18.24  | 18.26  | 18.27  | 18.29  | 18.31  | 18.32  | 18.33  | 1.1%      |
| Methanol (M85) 12/  | 8.99  | 10.79  | 10.69  | 10.80  | 12.89  | 12.91  | 13.30  | 13.30  | 13.70  | 13.72  | 13.73  | 13.74  | 13.76  | 13.77  | 13.79  | 13.80  | 13.82  | 13.82  | 13.84  | 13.84  | 13.85  | 13.86  | 2.0%      |
| Electricity   | 18.69 | 18.66  | 18.38  | 18.08  | 17.81  | 17.64  | 17.48  | 17.50  | 17.53  | 17.44  | 17.29  | 17.36  | 17.20  | 17.10  | 17.09  | 17.22  | 17.21  | 17.21  | 17.17  | 17.20  | 17.13  | 17.10  | -0.4%     |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 24.65 | 26.38  | 26.47  | 26.63  | 26.85  | 27.29  | 27.60  | 28.11  | 28.64  | 29.14  | 29.40  | 29.94  | 30.16  | 30.56  | 30.89  | 31.49  | 31.91  | 32.37  | 32.63  | 33.06  | 33.41  | 33.84  | 1.5%      |
| Commercial  | 17.53 | 18.59  | 18.64  | 18.67  | 18.73  | 18.86  | 19.03  | 19.35  | 19.70  | 19.93  | 20.10  | 20.44  | 20.59  | 20.77  | 21.02  | 21.32  | 21.51  | 21.67  | 21.78  | 21.94  | 21.95  | 22.03  | 1.0%      |
| Industrial  | 12.43 | 14.08  | 13.85  | 13.89  | 14.04  | 14.20  | 14.41  | 14.65  | 14.90  | 15.07  | 15.14  | 15.37  | 15.41  | 15.61  | 15.84  | 16.20  | 16.50  | 16.64  | 16.85  | 17.09  | 17.32  | 17.62  | 1.6%      |
| Transportation  | 32.77 | 42.58  | 42.32  | 43.09  | 44.09  | 45.23  | 46.33  | 47.26  | 48.47  | 49.57  | 50.63  | 51.62  | 52.48  | 53.45  | 54.42  | 55.55  | 56.66  | 57.53  | 58.38  | 59.29  | 60.13  | 61.02  | 2.9%      |
| Total Non-Renewable Expend.   | 87.39 | 101.63 | 101.27 | 102.28 | 103.72 | 105.57 | 107.36 | 109.38 | 111.70 | 113.70 | 115.28 | 117.37 | 118.63 | 120.38 | 122.17 | 124.56 | 126.59 | 128.21 | 129.64 | 131.38 | 132.81 | 134.51 | 2.0%      |
| Trans. Renewable Expend.  | 0.01  | 0.03   | 0.04   | 0.06   | 0.07   | 0.09   | 0.11   | 0.13   | 0.15   | 0.17   | 0.18   | 0.20   | 0.22   | 0.23   | 0.25   | 0.26   | 0.27   | 0.28   | 0.29   | 0.29   | 0.30   | 0.30   | 18.1%     |
| Total Expenditures  | 87.39 | 101.66 | 101.32 | 102.33 | 103.80 | 105.66 | 107.47 | 109.51 | 111.85 | 113.87 | 115.46 | 117.57 | 118.85 | 120.61 | 122.42 | 124.82 | 126.86 | 128.49 | 129.92 | 131.67 | 133.11 | 134.81 | 2.0%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 16. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**06 - East South Central**

|                                | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| <b>Residential</b>             | 14.99 | 14.85 | 14.70 | 14.53 | 14.37 | 14.32 | 14.27 | 14.29 | 14.31 | 14.30 | 14.22 | 14.24 | 14.14 | 14.09 | 14.08 | 14.09 | 14.13 | 14.11 | 14.15 | 14.18 | 14.12 | 14.09 | -0.3%     |
| Primary Energy 1/              | 7.03  | 7.52  | 7.44  | 7.38  | 7.33  | 7.33  | 7.32  | 7.34  | 7.36  | 7.35  | 7.32  | 7.29  | 7.27  | 7.27  | 7.25  | 7.24  | 7.23  | 7.22  | 7.22  | 7.21  | 7.20  | 7.20  | 0.1%      |
| Petroleum Products 2/          | 9.59  | 12.11 | 11.97 | 11.98 | 12.01 | 12.09 | 12.06 | 12.10 | 12.13 | 12.18 | 12.25 | 12.24 | 12.25 | 12.35 | 12.35 | 12.34 | 12.41 | 12.43 | 12.47 | 12.54 | 12.60 | 12.68 | 1.3%      |
| Distillate Fuel                | 5.26  | 6.85  | 6.73  | 6.72  | 6.78  | 6.80  | 6.81  | 6.85  | 6.89  | 6.94  | 7.02  | 7.02  | 7.02  | 7.06  | 7.08  | 7.11  | 7.16  | 7.17  | 7.20  | 7.28  | 7.34  | 7.42  | 1.6%      |
| Liquefied Petroleum Gas        | 11.18 | 13.63 | 13.45 | 13.43 | 13.40 | 13.46 | 13.39 | 13.41 | 13.41 | 13.44 | 13.48 | 13.45 | 13.46 | 13.58 | 13.55 | 13.53 | 13.59 | 13.61 | 13.65 | 13.72 | 13.77 | 13.85 | 1.0%      |
| Natural Gas                    | 6.50  | 6.60  | 6.53  | 6.46  | 6.41  | 6.40  | 6.41  | 6.44  | 6.46  | 6.45  | 6.42  | 6.39  | 6.38  | 6.37  | 6.37  | 6.36  | 6.36  | 6.34  | 6.35  | 6.33  | 6.32  | 6.33  | -0.1%     |
| Electricity                    | 20.73 | 20.45 | 20.24 | 19.99 | 19.74 | 19.65 | 19.56 | 19.59 | 19.61 | 19.61 | 19.48 | 19.55 | 19.38 | 19.29 | 19.28 | 19.30 | 19.38 | 19.35 | 19.42 | 19.50 | 19.39 | 19.32 | -0.3%     |
| <b>Commercial</b>              | 11.88 | 11.76 | 11.66 | 11.52 | 11.43 | 11.41 | 11.39 | 11.45 | 11.54 | 11.58 | 11.51 | 11.56 | 11.47 | 11.44 | 11.45 | 11.50 | 11.59 | 11.59 | 11.66 | 11.70 | 11.67 | 11.68 | -0.1%     |
| Primary Energy 1/              | 5.50  | 5.84  | 5.77  | 5.72  | 5.69  | 5.70  | 5.72  | 5.76  | 5.80  | 5.82  | 5.81  | 5.80  | 5.81  | 5.82  | 5.82  | 5.83  | 5.85  | 5.85  | 5.86  | 5.87  | 5.88  | 5.90  | 0.3%      |
| Petroleum Products 2/          | 5.76  | 6.98  | 6.83  | 6.83  | 6.87  | 6.91  | 6.92  | 6.96  | 7.00  | 7.06  | 7.14  | 7.14  | 7.14  | 7.21  | 7.23  | 7.25  | 7.31  | 7.33  | 7.36  | 7.45  | 7.51  | 7.59  | 1.3%      |
| Distillate Fuel                | 3.47  | 4.94  | 4.82  | 4.81  | 4.87  | 4.88  | 4.90  | 4.94  | 4.98  | 5.03  | 5.11  | 5.11  | 5.11  | 5.15  | 5.17  | 5.20  | 5.25  | 5.26  | 5.29  | 5.37  | 5.43  | 5.50  | 2.1%      |
| Residual Fuel                  | 2.50  | 2.86  | 2.69  | 2.70  | 2.71  | 2.72  | 2.74  | 2.77  | 2.79  | 2.80  | 2.81  | 2.82  | 2.84  | 2.86  | 2.87  | 2.89  | 2.90  | 2.92  | 2.93  | 2.95  | 2.96  | 2.98  | 0.8%      |
| Natural Gas 3/                 | 5.58  | 5.81  | 5.74  | 5.69  | 5.65  | 5.65  | 5.68  | 5.72  | 5.76  | 5.78  | 5.77  | 5.76  | 5.76  | 5.77  | 5.77  | 5.78  | 5.79  | 5.79  | 5.80  | 5.80  | 5.80  | 5.82  | 0.2%      |
| Electricity                    | 19.13 | 18.71 | 18.45 | 18.11 | 17.85 | 17.72 | 17.53 | 17.51 | 17.58 | 17.55 | 17.33 | 17.37 | 17.11 | 16.96 | 16.92 | 16.95 | 17.10 | 17.05 | 17.14 | 17.20 | 17.10 | 17.06 | -0.5%     |
| <b>Industrial 4/</b>           | 5.15  | 5.74  | 5.64  | 5.60  | 5.56  | 5.55  | 5.54  | 5.58  | 5.62  | 5.65  | 5.65  | 5.67  | 5.64  | 5.66  | 5.68  | 5.71  | 5.75  | 5.76  | 5.79  | 5.83  | 5.84  | 5.87  | 0.6%      |
| Primary Energy                 | 2.86  | 3.64  | 3.57  | 3.56  | 3.57  | 3.59  | 3.62  | 3.66  | 3.70  | 3.74  | 3.76  | 3.77  | 3.79  | 3.83  | 3.84  | 3.87  | 3.91  | 3.93  | 3.95  | 3.98  | 4.01  | 4.04  | 1.6%      |
| Petroleum Products 2/          | 3.89  | 5.52  | 5.38  | 5.36  | 5.38  | 5.39  | 5.38  | 5.40  | 5.41  | 5.44  | 5.48  | 5.47  | 5.47  | 5.52  | 5.52  | 5.54  | 5.58  | 5.59  | 5.61  | 5.65  | 5.68  | 5.72  | 1.8%      |
| Distillate Fuel                | 3.76  | 5.28  | 5.16  | 5.15  | 5.21  | 5.22  | 5.24  | 5.28  | 5.32  | 5.37  | 5.45  | 5.45  | 5.45  | 5.49  | 5.51  | 5.54  | 5.58  | 5.60  | 5.63  | 5.71  | 5.77  | 5.84  | 2.0%      |
| Liquefied Petroleum Gas        | 8.75  | 9.33  | 9.15  | 9.13  | 9.10  | 9.16  | 9.09  | 9.11  | 9.11  | 9.14  | 9.18  | 9.16  | 9.16  | 9.28  | 9.25  | 9.23  | 9.29  | 9.31  | 9.35  | 9.42  | 9.47  | 9.55  | 0.4%      |
| Residual Fuel                  | 2.26  | 2.89  | 2.72  | 2.73  | 2.74  | 2.75  | 2.77  | 2.79  | 2.81  | 2.83  | 2.84  | 2.85  | 2.87  | 2.88  | 2.90  | 2.91  | 2.93  | 2.94  | 2.96  | 2.97  | 2.99  | 3.01  | 1.3%      |
| Natural Gas 5/                 | 2.45  | 2.68  | 2.65  | 2.65  | 2.66  | 2.71  | 2.78  | 2.86  | 2.93  | 2.98  | 3.00  | 3.02  | 3.05  | 3.08  | 3.11  | 3.14  | 3.18  | 3.20  | 3.23  | 3.25  | 3.28  | 3.31  | 1.4%      |
| Metallurgical Coal             | 1.79  | 1.82  | 1.80  | 1.78  | 1.76  | 1.74  | 1.73  | 1.71  | 1.70  | 1.69  | 1.67  | 1.66  | 1.65  | 1.64  | 1.63  | 1.62  | 1.62  | 1.60  | 1.59  | 1.57  | 1.56  | 1.55  | -0.6%     |
| Steam Coal                     | 1.53  | 1.47  | 1.43  | 1.41  | 1.40  | 1.37  | 1.36  | 1.36  | 1.34  | 1.34  | 1.32  | 1.32  | 1.30  | 1.29  | 1.28  | 1.28  | 1.27  | 1.26  | 1.25  | 1.24  | 1.24  | 1.23  | -1.0%     |
| Electricity                    | 11.93 | 11.89 | 11.73 | 11.52 | 11.30 | 11.15 | 11.02 | 11.02 | 11.01 | 10.99 | 10.86 | 10.88 | 10.71 | 10.61 | 10.60 | 10.59 | 10.62 | 10.57 | 10.60 | 10.64 | 10.56 | 10.55 | -0.6%     |
| <b>Transportation</b>          | 7.49  | 9.22  | 8.96  | 8.91  | 8.93  | 8.93  | 8.95  | 8.93  | 8.96  | 8.98  | 9.01  | 9.00  | 9.00  | 9.01  | 9.01  | 9.01  | 9.02  | 9.01  | 9.00  | 9.00  | 8.99  | 8.98  | 0.8%      |
| Primary Energy                 | 7.47  | 9.21  | 8.95  | 8.90  | 8.92  | 8.92  | 8.94  | 8.92  | 8.95  | 8.97  | 9.00  | 8.99  | 8.99  | 9.00  | 8.99  | 9.00  | 9.01  | 9.00  | 8.99  | 8.99  | 8.98  | 8.97  | 0.8%      |
| Petroleum Products 2/          | 7.47  | 9.21  | 8.95  | 8.91  | 8.92  | 8.93  | 8.94  | 8.92  | 8.95  | 8.97  | 9.00  | 8.99  | 8.99  | 9.00  | 9.00  | 9.00  | 9.01  | 9.00  | 8.98  | 8.99  | 8.98  | 8.97  | 0.8%      |
| Distillate Fuel 6/             | 7.07  | 8.55  | 8.38  | 8.36  | 8.39  | 8.38  | 8.39  | 8.41  | 8.41  | 8.43  | 8.51  | 8.49  | 8.48  | 8.51  | 8.51  | 8.54  | 8.56  | 8.55  | 8.54  | 8.56  | 8.54  | 8.54  | 0.9%      |
| Jet Fuel 7/                    | 4.00  | 5.30  | 5.14  | 5.16  | 5.24  | 5.26  | 5.29  | 5.37  | 5.39  | 5.44  | 5.55  | 5.57  | 5.58  | 5.63  | 5.66  | 5.72  | 5.82  | 5.84  | 5.84  | 5.87  | 5.88  | 5.89  | 1.8%      |
| Motor Gasoline 8/              | 8.31  | 10.29 | 9.96  | 9.90  | 9.91  | 9.92  | 9.95  | 9.90  | 9.95  | 9.97  | 9.97  | 9.97  | 9.97  | 9.97  | 9.97  | 9.97  | 9.96  | 9.95  | 9.94  | 9.95  | 9.94  | 9.93  | 0.8%      |
| Residual Fuel                  | 1.84  | 2.23  | 2.05  | 2.06  | 2.07  | 2.07  | 2.10  | 2.13  | 2.15  | 2.17  | 2.17  | 2.19  | 2.20  | 2.22  | 2.23  | 2.25  | 2.26  | 2.28  | 2.29  | 2.31  | 2.32  | 2.34  | 1.1%      |
| Liquid Petroleum Gas 9/        | 10.36 | 13.39 | 13.18 | 13.13 | 13.08 | 13.11 | 13.01 | 12.99 | 12.96 | 12.97 | 12.98 | 12.93 | 12.90 | 13.00 | 12.95 | 12.90 | 12.94 | 12.93 | 12.94 | 12.97 | 12.99 | 13.03 | 1.0%      |
| Natural Gas 10/                | 6.12  | 6.49  | 6.41  | 6.39  | 6.40  | 6.48  | 6.59  | 6.74  | 6.88  | 7.00  | 7.07  | 7.13  | 7.20  | 7.26  | 7.31  | 7.35  | 7.39  | 7.42  | 7.44  | 7.45  | 7.47  | 7.49  | 0.9%      |
| Ethanol (E85) 11/              | 14.35 | 16.46 | 16.02 | 15.93 | 15.97 | 16.00 | 16.05 | 15.98 | 16.06 | 16.11 | 16.11 | 16.12 | 16.12 | 16.13 | 16.14 | 16.15 | 16.15 | 16.15 | 16.14 | 16.16 | 16.16 | 16.16 | 0.5%      |
| Methanol (M85) 12/             | 8.99  | 11.79 | 11.68 | 11.79 | 13.89 | 13.91 | 14.30 | 14.30 | 14.70 | 14.71 | 14.73 | 14.74 | 14.75 | 14.77 | 14.78 | 14.80 | 14.81 | 14.82 | 14.83 | 14.84 | 14.85 | 14.85 | 2.3%      |
| Electricity                    | 14.06 | 14.11 | 13.93 | 13.76 | 13.61 | 13.42 | 13.18 | 13.04 | 12.93 | 12.81 | 12.67 | 12.66 | 12.44 | 12.32 | 12.25 | 12.16 | 12.05 | 12.00 | 11.92 | 11.90 | 11.80 | 11.71 | -0.8%     |
| <b>Average End-Use Energy</b>  | 7.81  | 8.77  | 8.61  | 8.54  | 8.50  | 8.49  | 8.48  | 8.50  | 8.54  | 8.57  | 8.57  | 8.58  | 8.56  | 8.56  | 8.57  | 8.58  | 8.62  | 8.61  | 8.63  | 8.65  | 8.64  | 8.64  | 0.5%      |
| Primary Energy                 | 7.30  | 8.44  | 8.27  | 8.21  | 8.19  | 8.19  | 8.18  | 8.19  | 8.24  | 8.27  | 8.27  | 8.29  | 8.27  | 8.28  | 8.29  | 8.30  | 8.33  | 8.33  | 8.34  | 8.36  | 8.35  | 8.36  | 0.6%      |
| Electricity                    | 16.15 | 16.05 | 15.87 | 15.62 | 15.37 | 15.24 | 15.09 | 15.09 | 15.10 | 15.08 | 14.94 | 14.98 | 14.80 | 14.69 | 14.66 | 14.65 | 14.70 | 14.65 | 14.69 | 14.73 | 14.63 | 14.59 | -0.5%     |
| <b>Electric Generators 13/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Fossil Fuel Average            | 1.36  | 1.24  | 1.18  | 1.15  | 1.13  | 1.16  | 1.21  | 1.26  | 1.30  | 1.35  | 1.38  | 1.43  | 1.47  | 1.49  | 1.51  | 1.56  | 1.60  | 1.62  | 1.63  | 1.66  | 1.67  | 1.67  | 0.9%      |
| Petroleum Products             | 2.28  | 2.63  | 2.36  | 2.43  | 2.44  | 2.46  | 2.45  | 2.45  | 2.47  | 2.44  | 2.47  | 2.46  | 2.53  | 2.54  | 2.55  | 2.58  | 2.62  | 2.62  | 2.64  | 2.68  | 2.71  | 2.72  | 0.8%      |
| Distillate Fuel                | 3.35  | 5.13  | 5.01  | 5.00  | 5.06  | 5.07  | 5.09  | 5.13  | 5.17  | 5.22  | 5.30  | 5.30  | 5.30  | 5.34  | 5.36  | 5.39  | 5.44  | 5.45  | 5.48  | 5.56  | 5.62  | 5.69  | 2.4%      |
| Residual Fuel                  | 2.19  | 2.45  | 2.27  | 2.29  | 2.30  | 2.30  | 2.33  | 2.35  | 2.37  | 2.39  | 2.40  | 2.41  | 2.42  | 2.44  | 2.45  | 2.47  | 2.49  | 2.50  | 2.52  | 2.53  | 2.55  | 2.56  | 0.7%      |
| Natural Gas                    | 2.58  | 2.86  | 2.74  | 2.74  | 2.72  | 2.94  | 3.08  | 3.20  | 3.32  | 3.40  | 3.44  | 3.48  | 3.50  | 3.53  | 3.56  | 3.60  | 3.64  | 3.67  | 3.69  | 3.72  | 3.74  | 3.78  | 1.7%      |
| Steam Coal                     | 1.27  | 1.17  | 1.11  | 1.08  | 1.06  | 1.05  | 1.05  | 1.05  | 1.03  | 1.02  | 1.01  | 1.00  | 1.00  | 0.98  | 0.98  | 0.96  | 0.96  | 0.95  | 0.94  | 0.92  | 0.91  | 0.90  | -1.5%     |

**Table 16. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**06 - East South Central**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Average Price to All Users 14/  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Petroleum Products 2/   | 6.56  | 8.25  | 8.03  | 8.01  | 8.04  | 8.08  | 8.07  | 8.04  | 8.06  | 8.08  | 8.13  | 8.13  | 8.13  | 8.15  | 8.15  | 8.16  | 8.18  | 8.18  | 8.18  | 8.19  | 8.20  | 8.20  | 1.0%      |
| Distillate Fuel   | 6.35  | 7.86  | 7.72  | 7.69  | 7.73  | 7.73  | 7.73  | 7.76  | 7.76  | 7.79  | 7.87  | 7.86  | 7.84  | 7.87  | 7.87  | 7.89  | 7.92  | 7.92  | 7.91  | 7.94  | 7.94  | 7.95  | 1.0%      |
| Jet Fuel  | 4.00  | 5.30  | 5.14  | 5.16  | 5.24  | 5.26  | 5.29  | 5.37  | 5.39  | 5.44  | 5.55  | 5.57  | 5.58  | 5.63  | 5.66  | 5.72  | 5.82  | 5.84  | 5.84  | 5.87  | 5.88  | 5.89  | 1.8%      |
| Liquefied Petroleum Gas   | 9.91  | 11.33 | 11.16 | 11.14 | 11.12 | 11.19 | 11.12 | 11.13 | 11.13 | 11.16 | 11.18 | 11.15 | 11.15 | 11.26 | 11.22 | 11.18 | 11.24 | 11.25 | 11.28 | 11.34 | 11.38 | 11.44 | 0.7%      |
| Motor Gasoline 8/   | 8.31  | 10.29 | 9.96  | 9.90  | 9.91  | 9.92  | 9.95  | 9.90  | 9.95  | 9.97  | 9.97  | 9.97  | 9.97  | 9.97  | 9.97  | 9.97  | 9.96  | 9.95  | 9.94  | 9.95  | 9.94  | 9.93  | 0.8%      |
| Residual Fuel   | 2.12  | 2.42  | 2.25  | 2.26  | 2.27  | 2.27  | 2.29  | 2.32  | 2.34  | 2.36  | 2.37  | 2.39  | 2.40  | 2.42  | 2.43  | 2.45  | 2.46  | 2.47  | 2.49  | 2.50  | 2.51  | 2.51  | 0.8%      |
| Natural Gas   | 3.78  | 4.18  | 4.13  | 4.12  | 4.08  | 4.04  | 4.05  | 4.07  | 4.10  | 4.11  | 4.10  | 4.09  | 4.09  | 4.10  | 4.11  | 4.12  | 4.13  | 4.15  | 4.16  | 4.17  | 4.18  | 4.22  | 0.5%      |
| Coal  | 1.31  | 1.19  | 1.13  | 1.11  | 1.09  | 1.08  | 1.07  | 1.07  | 1.06  | 1.04  | 1.03  | 1.02  | 1.02  | 1.01  | 1.00  | 0.99  | 0.98  | 0.97  | 0.96  | 0.95  | 0.94  | 0.93  | -1.5%     |
| Ethanol (E85) 11/   | 14.35 | 16.46 | 16.02 | 15.93 | 15.97 | 16.00 | 16.05 | 15.98 | 16.06 | 16.11 | 16.11 | 16.12 | 16.12 | 16.13 | 16.14 | 16.15 | 16.15 | 16.15 | 16.14 | 16.16 | 16.16 | 16.16 | 0.5%      |
| Methanol (M85) 12/  | 8.99  | 11.79 | 11.68 | 11.79 | 13.89 | 13.91 | 14.30 | 14.30 | 14.70 | 14.71 | 14.73 | 14.74 | 14.75 | 14.77 | 14.78 | 14.80 | 14.81 | 14.82 | 14.83 | 14.84 | 14.85 | 14.85 | 2.3%      |
| Electricity   | 16.15 | 16.05 | 15.87 | 15.62 | 15.37 | 15.24 | 15.09 | 15.09 | 15.10 | 15.08 | 14.94 | 14.98 | 14.80 | 14.69 | 14.66 | 14.65 | 14.70 | 14.65 | 14.69 | 14.73 | 14.63 | 14.59 | -0.5%     |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Residential   | 8.59  | 9.13  | 9.13  | 9.12  | 9.13  | 9.22  | 9.27  | 9.37  | 9.48  | 9.61  | 9.63  | 9.74  | 9.76  | 9.85  | 9.90  | 10.00 | 10.12 | 10.20 | 10.28 | 10.38 | 10.43 | 10.53 | 0.9%      |
| Commercial  | 3.95  | 4.16  | 4.21  | 4.23  | 4.27  | 4.33  | 4.39  | 4.48  | 4.59  | 4.67  | 4.72  | 4.81  | 4.85  | 4.90  | 4.96  | 5.03  | 5.11  | 5.14  | 5.19  | 5.23  | 5.24  | 5.25  | 1.3%      |
| Industrial  | 8.93  | 9.86  | 9.72  | 9.76  | 9.87  | 9.99  | 10.13 | 10.32 | 10.49 | 10.64 | 10.69 | 10.82 | 10.84 | 10.97 | 11.15 | 11.34 | 11.57 | 11.66 | 11.84 | 12.02 | 12.16 | 12.36 | 1.5%      |
| Transportation  | 12.82 | 16.44 | 16.32 | 16.56 | 16.89 | 17.24 | 17.59 | 17.84 | 18.19 | 18.49 | 18.78 | 19.03 | 19.21 | 19.43 | 19.66 | 19.94 | 20.20 | 20.37 | 20.51 | 20.72 | 20.88 | 21.05 | 2.3%      |
| Total Non-Renewable Expend.   | 34.29 | 39.60 | 39.38 | 39.67 | 40.16 | 40.79 | 41.38 | 42.03 | 42.75 | 43.41 | 43.82 | 44.40 | 44.66 | 45.15 | 45.67 | 46.31 | 46.99 | 47.38 | 47.83 | 48.36 | 48.71 | 49.19 | 1.7%      |
| Trans. Renewable Expend.  | 0.00  | 0.01  | 0.01  | 0.02  | 0.02  | 0.03  | 0.03  | 0.04  | 0.04  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.07  | 0.08  | 0.08  | 0.08  | 0.08  | 16.9%     |
| Total Expenditures  | 34.30 | 39.61 | 39.39 | 39.69 | 40.18 | 40.82 | 41.41 | 42.06 | 42.79 | 43.46 | 43.87 | 44.46 | 44.72 | 45.21 | 45.74 | 46.38 | 47.07 | 47.45 | 47.90 | 48.44 | 48.79 | 49.27 | 1.7%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 17. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**07 - West South Central**

|                                | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| <b>Residential</b>             | 14.84 | 14.42 | 14.21 | 14.04 | 14.12 | 14.22 | 14.11 | 14.18 | 14.31 | 14.24 | 14.02 | 14.06 | 13.90 | 13.81 | 13.75 | 13.85 | 13.93 | 13.95 | 14.01 | 14.10 | 14.12 | 14.24 | -0.2%     |
| Primary Energy 1/              | 6.46  | 6.67  | 6.61  | 6.54  | 6.49  | 6.48  | 6.48  | 6.51  | 6.53  | 6.52  | 6.50  | 6.47  | 6.46  | 6.46  | 6.44  | 6.43  | 6.42  | 6.41  | 6.40  | 6.39  | 6.38  | 6.38  | -0.1%     |
| Petroleum Products 2/          | 9.75  | 12.53 | 12.35 | 12.33 | 12.30 | 12.36 | 12.29 | 12.30 | 12.30 | 12.33 | 12.37 | 12.35 | 12.35 | 12.46 | 12.44 | 12.41 | 12.47 | 12.49 | 12.53 | 12.59 | 12.64 | 12.72 | 1.2%      |
| Distillate Fuel                | 5.07  | 5.88  | 5.76  | 5.75  | 5.80  | 5.82  | 5.84  | 5.88  | 5.92  | 5.97  | 6.05  | 6.05  | 6.04  | 6.08  | 6.10  | 6.14  | 6.19  | 6.20  | 6.24  | 6.31  | 6.37  | 6.44  | 1.1%      |
| Liquefied Petroleum Gas        | 9.82  | 12.62 | 12.44 | 12.42 | 12.39 | 12.45 | 12.38 | 12.39 | 12.40 | 12.43 | 12.47 | 12.44 | 12.45 | 12.56 | 12.54 | 12.52 | 12.58 | 12.60 | 12.64 | 12.71 | 12.76 | 12.84 | 1.2%      |
| Natural Gas                    | 6.21  | 6.26  | 6.21  | 6.15  | 6.10  | 6.09  | 6.11  | 6.14  | 6.17  | 6.17  | 6.16  | 6.13  | 6.13  | 6.12  | 6.12  | 6.11  | 6.10  | 6.09  | 6.09  | 6.08  | 6.07  | 6.08  | -0.1%     |
| Electricity                    | 21.14 | 20.82 | 20.38 | 20.03 | 20.15 | 20.24 | 19.93 | 19.96 | 20.09 | 19.86 | 19.40 | 19.39 | 19.08 | 18.90 | 18.75 | 18.89 | 18.99 | 19.01 | 19.08 | 19.23 | 19.24 | 19.40 | -0.4%     |
| <b>Commercial</b>              | 13.45 | 13.30 | 12.93 | 12.72 | 12.76 | 12.84 | 12.71 | 12.79 | 12.92 | 12.86 | 12.65 | 12.64 | 12.46 | 12.35 | 12.27 | 12.36 | 12.44 | 12.46 | 12.52 | 12.60 | 12.61 | 12.73 | -0.2%     |
| Primary Energy 1/              | 4.63  | 4.92  | 4.87  | 4.83  | 4.80  | 4.80  | 4.83  | 4.88  | 4.93  | 4.95  | 4.95  | 4.95  | 4.96  | 4.98  | 4.99  | 5.01  | 5.02  | 5.03  | 5.05  | 5.05  | 5.07  | 5.10  | 0.4%      |
| Petroleum Products 2/          | 4.70  | 6.12  | 5.97  | 5.96  | 6.00  | 6.03  | 6.04  | 6.08  | 6.11  | 6.16  | 6.24  | 6.23  | 6.24  | 6.29  | 6.30  | 6.32  | 6.38  | 6.40  | 6.43  | 6.50  | 6.56  | 6.63  | 1.6%      |
| Distillate Fuel                | 3.36  | 4.75  | 4.63  | 4.63  | 4.68  | 4.69  | 4.71  | 4.75  | 4.79  | 4.84  | 4.92  | 4.92  | 4.92  | 4.96  | 4.98  | 5.01  | 5.06  | 5.08  | 5.11  | 5.18  | 5.24  | 5.32  | 2.1%      |
| Residual Fuel                  | 2.50  | 2.57  | 2.40  | 2.41  | 2.43  | 2.45  | 2.46  | 2.48  | 2.50  | 2.52  | 2.53  | 2.55  | 2.57  | 2.58  | 2.60  | 2.62  | 2.64  | 2.65  | 2.67  | 2.69  | 2.70  | 2.72  | 0.4%      |
| Natural Gas 3/                 | 4.62  | 4.84  | 4.80  | 4.75  | 4.72  | 4.73  | 4.76  | 4.81  | 4.85  | 4.88  | 4.88  | 4.87  | 4.88  | 4.90  | 4.91  | 4.93  | 4.94  | 4.95  | 4.97  | 4.97  | 4.98  | 5.01  | 0.4%      |
| Electricity                    | 19.30 | 19.17 | 18.53 | 18.17 | 18.26 | 18.38 | 18.09 | 18.16 | 18.33 | 18.18 | 17.78 | 17.76 | 17.41 | 17.19 | 17.03 | 17.15 | 17.26 | 17.29 | 17.37 | 17.49 | 17.50 | 17.67 | -0.4%     |
| <b>Industrial 4/</b>           | 4.38  | 5.14  | 5.04  | 5.01  | 5.01  | 5.04  | 5.04  | 5.08  | 5.13  | 5.17  | 5.19  | 5.19  | 5.19  | 5.25  | 5.25  | 5.27  | 5.32  | 5.35  | 5.38  | 5.42  | 5.45  | 5.50  | 1.0%      |
| Primary Energy                 | 3.89  | 4.68  | 4.59  | 4.58  | 4.56  | 4.59  | 4.59  | 4.62  | 4.67  | 4.71  | 4.74  | 4.74  | 4.76  | 4.83  | 4.84  | 4.85  | 4.90  | 4.92  | 4.95  | 4.99  | 5.02  | 5.07  | 1.2%      |
| Petroleum Products 2/          | 5.35  | 6.51  | 6.34  | 6.32  | 6.30  | 6.34  | 6.28  | 6.29  | 6.30  | 6.33  | 6.36  | 6.34  | 6.34  | 6.44  | 6.43  | 6.42  | 6.49  | 6.50  | 6.53  | 6.58  | 6.62  | 6.68  | 1.0%      |
| Distillate Fuel                | 3.77  | 5.14  | 5.03  | 5.02  | 5.07  | 5.09  | 5.11  | 5.15  | 5.18  | 5.23  | 5.32  | 5.32  | 5.31  | 5.35  | 5.37  | 5.40  | 5.45  | 5.47  | 5.50  | 5.58  | 5.64  | 5.71  | 1.9%      |
| Liquefied Petroleum Gas        | 6.85  | 7.48  | 7.30  | 7.28  | 7.25  | 7.31  | 7.24  | 7.25  | 7.26  | 7.29  | 7.32  | 7.30  | 7.31  | 7.42  | 7.40  | 7.37  | 7.44  | 7.46  | 7.50  | 7.57  | 7.62  | 7.70  | 0.5%      |
| Residual Fuel                  | 3.61  | 2.91  | 2.73  | 2.75  | 2.77  | 2.79  | 2.80  | 2.82  | 2.84  | 2.85  | 2.87  | 2.89  | 2.90  | 2.92  | 2.94  | 2.96  | 2.98  | 2.99  | 3.01  | 3.03  | 3.04  | 3.06  | -0.7%     |
| Natural Gas 5/                 | 2.35  | 2.57  | 2.56  | 2.55  | 2.57  | 2.61  | 2.68  | 2.76  | 2.83  | 2.88  | 2.90  | 2.92  | 2.96  | 2.99  | 3.02  | 3.06  | 3.10  | 3.12  | 3.15  | 3.17  | 3.20  | 3.25  | 1.5%      |
| Metallurgical Coal             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |
| Steam Coal                     | 1.44  | 1.39  | 1.32  | 1.31  | 1.30  | 1.30  | 1.29  | 1.28  | 1.28  | 1.27  | 1.26  | 1.26  | 1.25  | 1.24  | 1.23  | 1.23  | 1.22  | 1.22  | 1.21  | 1.20  | 1.19  | 1.20  | -0.8%     |
| Electricity                    | 11.30 | 11.47 | 11.21 | 11.04 | 11.13 | 11.24 | 11.14 | 11.27 | 11.46 | 11.47 | 11.29 | 11.29 | 11.05 | 10.88 | 10.76 | 10.83 | 10.88 | 10.87 | 10.92 | 10.96 | 10.94 | 11.05 | -0.1%     |
| <b>Transportation</b>          | 6.60  | 8.33  | 8.08  | 8.04  | 8.05  | 8.05  | 8.06  | 8.04  | 8.07  | 8.08  | 8.11  | 8.09  | 8.09  | 8.10  | 8.09  | 8.10  | 8.11  | 8.10  | 8.09  | 8.08  | 8.06  | 8.05  | 0.9%      |
| Primary Energy                 | 6.59  | 8.32  | 8.07  | 8.03  | 8.05  | 8.04  | 8.05  | 8.03  | 8.06  | 8.07  | 8.10  | 8.08  | 8.07  | 8.08  | 8.08  | 8.08  | 8.10  | 8.09  | 8.08  | 8.07  | 8.05  | 8.04  | 0.9%      |
| Petroleum Products 2/          | 6.59  | 8.33  | 8.08  | 8.04  | 8.05  | 8.05  | 8.05  | 8.04  | 8.06  | 8.07  | 8.10  | 8.08  | 8.07  | 8.08  | 8.08  | 8.08  | 8.10  | 8.08  | 8.07  | 8.06  | 8.04  | 8.03  | 0.9%      |
| Distillate Fuel 6/             | 7.11  | 8.55  | 8.38  | 8.36  | 8.39  | 8.38  | 8.39  | 8.41  | 8.41  | 8.43  | 8.51  | 8.50  | 8.48  | 8.51  | 8.51  | 8.54  | 8.57  | 8.56  | 8.55  | 8.56  | 8.54  | 8.54  | 0.8%      |
| Jet Fuel 7/                    | 3.63  | 5.03  | 4.87  | 4.89  | 4.97  | 4.99  | 5.02  | 5.10  | 5.12  | 5.17  | 5.28  | 5.30  | 5.31  | 5.36  | 5.39  | 5.44  | 5.55  | 5.57  | 5.58  | 5.59  | 5.60  | 5.62  | 2.0%      |
| Motor Gasoline 8/              | 8.14  | 10.34 | 10.02 | 9.96  | 9.98  | 10.00 | 10.01 | 9.97  | 10.02 | 10.04 | 10.04 | 10.03 | 10.03 | 10.04 | 10.04 | 10.04 | 10.04 | 10.03 | 10.03 | 10.02 | 10.01 | 10.00 | 0.9%      |
| Residual Fuel                  | 2.21  | 2.89  | 2.72  | 2.74  | 2.75  | 2.77  | 2.79  | 2.80  | 2.82  | 2.84  | 2.86  | 2.88  | 2.89  | 2.91  | 2.93  | 2.95  | 2.97  | 2.98  | 3.00  | 3.02  | 3.04  | 3.06  | 1.5%      |
| Liquid Petroleum Gas 9/        | 11.66 | 12.27 | 12.06 | 12.01 | 11.96 | 11.99 | 11.89 | 11.87 | 11.85 | 11.85 | 11.86 | 11.81 | 11.79 | 11.88 | 11.83 | 11.78 | 11.82 | 11.81 | 11.82 | 11.85 | 11.87 | 11.91 | 0.1%      |
| Natural Gas 10/                | 4.29  | 4.86  | 4.76  | 4.72  | 4.75  | 4.87  | 5.06  | 5.30  | 5.56  | 5.76  | 5.92  | 6.05  | 6.18  | 6.30  | 6.39  | 6.46  | 6.52  | 6.56  | 6.59  | 6.61  | 6.63  | 6.66  | 2.0%      |
| Ethanol (E85) 11/              | 14.35 | 17.82 | 17.31 | 17.24 | 17.57 | 17.61 | 17.66 | 17.61 | 17.69 | 17.74 | 17.76 | 17.77 | 17.78 | 17.80 | 17.81 | 17.83 | 17.85 | 17.85 | 17.87 | 17.87 | 17.88 | 17.89 | 1.0%      |
| Methanol (M85) 12/             | 8.99  | 12.21 | 12.10 | 12.21 | 14.30 | 14.32 | 14.71 | 14.71 | 15.11 | 15.13 | 15.14 | 15.16 | 15.17 | 15.18 | 15.20 | 15.21 | 15.23 | 15.24 | 15.25 | 15.26 | 15.27 | 15.27 | 2.4%      |
| Electricity                    | 12.67 | 12.72 | 12.53 | 12.38 | 12.34 | 12.29 | 12.21 | 12.27 | 12.37 | 12.47 | 12.36 | 12.33 | 12.06 | 11.92 | 11.79 | 11.74 | 11.69 | 11.61 | 11.55 | 11.47 | 11.35 | 11.28 | -0.5%     |
| <b>Average End-Use Energy</b>  | 6.24  | 7.24  | 7.08  | 7.04  | 7.04  | 7.07  | 7.05  | 7.08  | 7.14  | 7.16  | 7.16  | 7.17  | 7.15  | 7.18  | 7.18  | 7.20  | 7.25  | 7.27  | 7.30  | 7.33  | 7.34  | 7.39  | 0.8%      |
| Primary Energy                 | 5.66  | 6.76  | 6.60  | 6.57  | 6.57  | 6.59  | 6.58  | 6.61  | 6.66  | 6.69  | 6.70  | 6.70  | 6.70  | 6.73  | 6.73  | 6.75  | 6.80  | 6.82  | 6.84  | 6.86  | 6.88  | 6.91  | 0.9%      |
| Electricity                    | 17.14 | 17.12 | 16.72 | 16.43 | 16.51 | 16.62 | 16.38 | 16.46 | 16.61 | 16.50 | 16.18 | 16.18 | 15.89 | 15.71 | 15.57 | 15.67 | 15.75 | 15.77 | 15.83 | 15.93 | 15.93 | 16.07 | -0.3%     |
| <b>Electric Generators 13/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Fossil Fuel Average            | 1.71  | 1.80  | 1.74  | 1.72  | 1.74  | 1.74  | 1.77  | 1.81  | 1.86  | 1.90  | 1.91  | 1.93  | 1.95  | 1.97  | 1.99  | 2.01  | 2.05  | 2.07  | 2.09  | 2.10  | 2.12  | 2.14  | 1.0%      |
| Petroleum Products             | 2.58  | 3.72  | 3.50  | 3.63  | 3.74  | 3.83  | 3.88  | 3.83  | 3.86  | 3.91  | 3.99  | 4.09  | 4.17  | 4.19  | 4.19  | 4.20  | 4.30  | 4.38  | 4.42  | 4.43  | 4.51  | 4.55  | 2.6%      |
| Distillate Fuel                | 3.59  | 4.68  | 4.56  | 4.56  | 4.61  | 4.63  | 4.65  | 4.69  | 4.72  | 4.77  | 4.85  | 4.85  | 4.85  | 4.89  | 4.91  | 4.94  | 4.99  | 5.01  | 5.04  | 5.12  | 5.18  | 5.25  | 1.7%      |
| Residual Fuel                  | 2.49  | 3.27  | 3.09  | 3.11  | 3.13  | 3.14  | 3.16  | 3.18  | 3.20  | 3.21  | 3.23  | 3.25  | 3.26  | 3.28  | 3.30  | 3.31  | 3.33  | 3.35  | 3.37  | 3.38  | 3.40  | 3.42  | 1.4%      |
| Natural Gas                    | 2.23  | 2.48  | 2.45  | 2.44  | 2.43  | 2.46  | 2.53  | 2.62  | 2.70  | 2.75  | 2.78  | 2.81  | 2.85  | 2.88  | 2.92  | 2.95  | 3.00  | 3.04  | 3.07  | 3.09  | 3.12  | 3.17  | 1.6%      |
| Steam Coal                     | 1.27  | 1.27  | 1.22  | 1.20  | 1.19  | 1.17  | 1.15  | 1.13  | 1.11  | 1.10  | 1.08  | 1.07  | 1.06  | 1.05  | 1.04  | 1.03  | 1.02  | 1.01  | 1.00  | 0.99  | 0.98  | 0.97  | -1.2%     |

**Table 17. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**07 - West South Central**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Average Price to All Users 14/  |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Petroleum Products 2/   | 6.13  | 7.58  | 7.38  | 7.36  | 7.36  | 7.37  | 7.35  | 7.35  | 7.37   | 7.39   | 7.42   | 7.41   | 7.41   | 7.46   | 7.45   | 7.45   | 7.50   | 7.50   | 7.51   | 7.52   | 7.54   | 7.55   | 1.0%      |
| Distillate Fuel   | 6.37  | 7.81  | 7.66  | 7.64  | 7.68  | 7.67  | 7.68  | 7.70  | 7.71   | 7.74   | 7.82   | 7.81   | 7.80   | 7.82   | 7.83   | 7.85   | 7.89   | 7.88   | 7.89   | 7.90   | 7.90   | 7.92   | 1.0%      |
| Jet Fuel  | 3.63  | 5.03  | 4.87  | 4.89  | 4.97  | 4.99  | 5.02  | 5.10  | 5.12   | 5.17   | 5.28   | 5.30   | 5.31   | 5.36   | 5.39   | 5.44   | 5.55   | 5.57   | 5.58   | 5.59   | 5.60   | 5.62   | 2.0%      |
| Liquefied Petroleum Gas   | 6.92  | 7.59  | 7.41  | 7.38  | 7.36  | 7.42  | 7.35  | 7.36  | 7.36   | 7.39   | 7.43   | 7.40   | 7.41   | 7.52   | 7.50   | 7.47   | 7.54   | 7.56   | 7.60   | 7.66   | 7.71   | 7.79   | 0.5%      |
| Motor Gasoline 8/   | 8.14  | 10.34 | 10.02 | 9.96  | 9.98  | 10.00 | 10.01 | 9.97  | 10.02  | 10.04  | 10.03  | 10.03  | 10.03  | 10.04  | 10.04  | 10.04  | 10.03  | 10.03  | 10.03  | 10.02  | 10.01  | 10.00  | 0.9%      |
| Residual Fuel   | 2.31  | 2.91  | 2.73  | 2.75  | 2.76  | 2.78  | 2.79  | 2.81  | 2.83   | 2.85   | 2.86   | 2.88   | 2.90   | 2.91   | 2.93   | 2.95   | 2.97   | 2.98   | 3.00   | 3.02   | 3.04   | 3.06   | 1.3%      |
| Natural Gas   | 2.65  | 2.94  | 2.92  | 2.91  | 2.90  | 2.93  | 2.99  | 3.06  | 3.13   | 3.17   | 3.20   | 3.21   | 3.24   | 3.28   | 3.30   | 3.33   | 3.36   | 3.39   | 3.42   | 3.44   | 3.47   | 3.51   | 1.3%      |
| Coal  | 1.28  | 1.27  | 1.22  | 1.20  | 1.19  | 1.17  | 1.15  | 1.13  | 1.12   | 1.11   | 1.08   | 1.08   | 1.07   | 1.06   | 1.05   | 1.03   | 1.02   | 1.02   | 1.01   | 1.00   | 0.98   | 0.98   | -1.2%     |
| Ethanol (E85) 11/   | 14.35 | 17.82 | 17.31 | 17.24 | 17.57 | 17.61 | 17.66 | 17.61 | 17.69  | 17.74  | 17.76  | 17.77  | 17.78  | 17.80  | 17.81  | 17.83  | 17.85  | 17.85  | 17.87  | 17.87  | 17.88  | 17.89  | 1.0%      |
| Methanol (M85) 12/  | 8.99  | 12.21 | 12.10 | 12.21 | 14.30 | 14.32 | 14.71 | 14.71 | 15.11  | 15.13  | 15.14  | 15.16  | 15.17  | 15.18  | 15.20  | 15.21  | 15.23  | 15.24  | 15.25  | 15.26  | 15.27  | 15.27  | 2.4%      |
| Electricity   | 17.14 | 17.12 | 16.72 | 16.43 | 16.51 | 16.62 | 16.38 | 16.46 | 16.61  | 16.50  | 16.18  | 16.18  | 15.89  | 15.71  | 15.57  | 15.67  | 15.75  | 15.77  | 15.83  | 15.93  | 15.93  | 16.07  | -0.3%     |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 13.91 | 15.06 | 15.01 | 15.01 | 15.26 | 15.57 | 15.59 | 15.83 | 16.13  | 16.28  | 16.21  | 16.43  | 16.47  | 16.63  | 16.74  | 17.06  | 17.37  | 17.65  | 17.88  | 18.21  | 18.46  | 18.88  | 1.4%      |
| Commercial  | 10.06 | 10.68 | 10.60 | 10.59 | 10.76 | 10.96 | 11.02 | 11.22 | 11.47  | 11.59  | 11.58  | 11.73  | 11.73  | 11.78  | 11.84  | 12.02  | 12.17  | 12.26  | 12.37  | 12.48  | 12.52  | 12.64  | 1.0%      |
| Industrial  | 28.09 | 32.72 | 32.31 | 32.58 | 33.32 | 34.14 | 34.70 | 35.49 | 36.26  | 36.93  | 37.35  | 37.76  | 38.02  | 38.87  | 39.39  | 40.06  | 40.91  | 41.39  | 42.04  | 42.69  | 43.40  | 44.32  | 2.1%      |
| Transportation  | 24.83 | 32.81 | 32.62 | 33.28 | 34.13 | 35.01 | 35.84 | 36.64 | 37.52  | 38.36  | 39.22  | 39.97  | 40.59  | 41.34  | 42.05  | 42.92  | 43.81  | 44.44  | 45.06  | 45.71  | 46.31  | 46.95  | 2.9%      |
| Total Non-Renewable Expend.   | 76.89 | 91.28 | 90.54 | 91.46 | 93.48 | 95.69 | 97.15 | 99.18 | 101.38 | 103.16 | 104.35 | 105.89 | 106.81 | 108.62 | 110.02 | 112.06 | 114.27 | 115.75 | 117.36 | 119.08 | 120.69 | 122.79 | 2.2%      |
| Trans. Renewable Expend.  | 0.00  | 0.02  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08   | 0.09   | 0.10   | 0.11   | 0.12   | 0.13   | 0.14   | 0.14   | 0.15   | 0.15   | 0.16   | 0.16   | 0.16   | 0.16   | 17.7%     |
| Total Expenditures  | 76.90 | 91.30 | 90.56 | 91.49 | 93.52 | 95.74 | 97.22 | 99.26 | 101.46 | 103.25 | 104.45 | 106.00 | 106.93 | 108.75 | 110.15 | 112.20 | 114.42 | 115.90 | 117.51 | 119.24 | 120.85 | 122.95 | 2.2%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 18. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**08 - Mountain**

|                         | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998- | 2020  |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Residential             | 12.81 | 12.95 | 12.83 | 12.80 | 12.98 | 13.04 | 13.01 | 13.09 | 13.22 | 13.24 | 13.23 | 13.25 | 13.21 | 13.22 | 13.21 | 13.18 | 13.15 | 13.14 | 13.09 | 13.08 | 13.05 | 13.05 | 13.05 | 0.1%  |
| Primary Energy 1/       | 5.86  | 6.05  | 5.98  | 5.97  | 6.08  | 6.19  | 6.24  | 6.30  | 6.37  | 6.41  | 6.41  | 6.41  | 6.40  | 6.38  | 6.35  | 6.31  | 6.30  | 6.30  | 6.31  | 6.31  | 6.31  | 6.32  | 6.32  | 0.3%  |
| Petroleum Products 2/   | 8.29  | 11.10 | 10.96 | 10.98 | 10.99 | 11.07 | 11.04 | 11.08 | 11.10 | 11.15 | 11.21 | 11.19 | 11.19 | 11.29 | 11.27 | 11.25 | 11.32 | 11.33 | 11.37 | 11.44 | 11.49 | 11.57 | 11.57 | 1.5%  |
| Distillate Fuel         | 5.59  | 7.21  | 7.09  | 7.09  | 7.14  | 7.16  | 7.17  | 7.21  | 7.25  | 7.30  | 7.38  | 7.33  | 7.28  | 7.28  | 7.26  | 7.26  | 7.28  | 7.27  | 7.28  | 7.33  | 7.37  | 7.43  | 7.43  | 1.3%  |
| Liquefied Petroleum Gas | 9.13  | 12.27 | 12.09 | 12.07 | 12.04 | 12.10 | 12.03 | 12.05 | 12.05 | 12.08 | 12.12 | 12.09 | 12.10 | 12.22 | 12.19 | 12.17 | 12.23 | 12.25 | 12.29 | 12.29 | 12.36 | 12.41 | 12.49 | 1.4%  |
| Natural Gas             | 5.63  | 5.54  | 5.49  | 5.47  | 5.60  | 5.72  | 5.78  | 5.85  | 5.93  | 5.97  | 5.98  | 5.98  | 5.98  | 5.95  | 5.93  | 5.89  | 5.88  | 5.89  | 5.90  | 5.91  | 5.91  | 5.91  | 5.91  | 0.2%  |
| Electricity             | 22.65 | 23.00 | 22.72 | 22.64 | 22.83 | 22.73 | 22.52 | 22.56 | 22.73 | 22.67 | 22.60 | 22.60 | 22.44 | 22.42 | 22.38 | 22.28 | 22.14 | 22.06 | 21.85 | 21.75 | 21.61 | 21.56 | 21.56 | -0.2% |
| Commercial              | 11.73 | 11.92 | 11.79 | 11.74 | 11.91 | 11.95 | 11.98 | 12.11 | 12.21 | 12.15 | 12.15 | 12.18 | 12.11 | 12.11 | 12.12 | 12.14 | 12.10 | 12.09 | 12.05 | 12.00 | 11.93 | 11.92 | 11.92 | 0.1%  |
| Primary Energy 1/       | 4.57  | 4.77  | 4.72  | 4.73  | 4.85  | 4.96  | 5.02  | 5.10  | 5.18  | 5.24  | 5.27  | 5.28  | 5.28  | 5.27  | 5.25  | 5.23  | 5.23  | 5.24  | 5.26  | 5.27  | 5.28  | 5.30  | 5.30  | 0.7%  |
| Petroleum Products 2/   | 5.47  | 6.96  | 6.80  | 6.79  | 6.82  | 6.85  | 6.86  | 6.89  | 6.93  | 6.97  | 7.04  | 7.00  | 6.97  | 6.98  | 6.97  | 6.96  | 6.99  | 6.98  | 6.99  | 7.04  | 7.08  | 7.13  | 7.13  | 1.2%  |
| Distillate Fuel         | 4.10  | 5.45  | 5.33  | 5.33  | 5.38  | 5.39  | 5.41  | 5.45  | 5.49  | 5.54  | 5.62  | 5.57  | 5.52  | 5.52  | 5.50  | 5.50  | 5.52  | 5.51  | 5.52  | 5.57  | 5.61  | 5.66  | 5.66  | 1.5%  |
| Residual Fuel           | 2.50  | 2.60  | 2.43  | 2.45  | 2.46  | 2.48  | 2.49  | 2.51  | 2.53  | 2.54  | 2.56  | 2.57  | 2.59  | 2.61  | 2.62  | 2.64  | 2.66  | 2.67  | 2.69  | 2.70  | 2.72  | 2.74  | 2.74  | 0.4%  |
| Natural Gas 3/          | 4.57  | 4.63  | 4.61  | 4.61  | 4.76  | 4.88  | 4.95  | 5.04  | 5.14  | 5.20  | 5.22  | 5.24  | 5.25  | 5.24  | 5.22  | 5.20  | 5.20  | 5.21  | 5.23  | 5.24  | 5.25  | 5.26  | 5.26  | 0.6%  |
| Electricity             | 18.81 | 19.07 | 18.82 | 18.67 | 18.81 | 18.71 | 18.64 | 18.77 | 18.83 | 18.60 | 18.53 | 18.55 | 18.35 | 18.35 | 18.37 | 18.42 | 18.33 | 18.27 | 18.17 | 18.05 | 17.89 | 17.83 | 17.83 | -0.2% |
| Industrial 4/           | 5.16  | 5.86  | 5.78  | 5.77  | 5.87  | 5.91  | 5.93  | 5.99  | 6.04  | 6.05  | 6.07  | 6.07  | 6.04  | 6.04  | 6.04  | 6.04  | 6.05  | 6.05  | 6.06  | 6.07  | 6.07  | 6.10  | 6.10  | 0.8%  |
| Primary Energy          | 3.16  | 3.98  | 3.93  | 3.95  | 4.03  | 4.10  | 4.13  | 4.18  | 4.24  | 4.30  | 4.34  | 4.34  | 4.35  | 4.36  | 4.35  | 4.35  | 4.38  | 4.39  | 4.42  | 4.45  | 4.48  | 4.52  | 4.52  | 1.6%  |
| Petroleum Products 2/   | 4.22  | 5.85  | 5.70  | 5.68  | 5.70  | 5.72  | 5.71  | 5.73  | 5.76  | 5.79  | 5.85  | 5.81  | 5.79  | 5.80  | 5.79  | 5.78  | 5.81  | 5.80  | 5.82  | 5.85  | 5.89  | 5.93  | 5.93  | 1.6%  |
| Distillate Fuel         | 4.27  | 5.82  | 5.70  | 5.69  | 5.74  | 5.76  | 5.78  | 5.82  | 5.86  | 5.90  | 5.99  | 5.93  | 5.89  | 5.88  | 5.87  | 5.86  | 5.89  | 5.87  | 5.88  | 5.88  | 5.93  | 5.97  | 6.03  | 1.6%  |
| Liquefied Petroleum Gas | 6.48  | 8.53  | 8.35  | 8.32  | 8.30  | 8.36  | 8.29  | 8.30  | 8.30  | 8.34  | 8.37  | 8.35  | 8.35  | 8.47  | 8.45  | 8.42  | 8.49  | 8.51  | 8.55  | 8.62  | 8.67  | 8.75  | 8.75  | 1.4%  |
| Residual Fuel           | 2.85  | 3.17  | 3.00  | 3.02  | 3.03  | 3.05  | 3.06  | 3.08  | 3.10  | 3.11  | 3.13  | 3.14  | 3.16  | 3.18  | 3.19  | 3.21  | 3.23  | 3.24  | 3.26  | 3.27  | 3.29  | 3.31  | 3.31  | 0.7%  |
| Natural Gas 5/          | 2.36  | 2.40  | 2.41  | 2.47  | 2.68  | 2.85  | 2.96  | 3.07  | 3.20  | 3.28  | 3.33  | 3.37  | 3.41  | 3.41  | 3.42  | 3.42  | 3.45  | 3.49  | 3.54  | 3.58  | 3.60  | 3.63  | 3.63  | 2.0%  |
| Metallurgical Coal      | 1.93  | 1.98  | 1.96  | 1.94  | 1.92  | 1.91  | 1.89  | 1.87  | 1.86  | 1.84  | 1.82  | 1.81  | 1.80  | 1.78  | 1.77  | 1.76  | 1.76  | 1.74  | 1.72  | 1.71  | 1.69  | 1.68  | 1.68  | -0.6% |
| Steam Coal              | 1.30  | 1.28  | 1.29  | 1.30  | 1.30  | 1.29  | 1.27  | 1.26  | 1.25  | 1.24  | 1.22  | 1.22  | 1.21  | 1.20  | 1.19  | 1.18  | 1.17  | 1.16  | 1.15  | 1.14  | 1.12  | 1.11  | 1.11  | -0.7% |
| Electricity             | 11.97 | 12.20 | 12.04 | 11.87 | 11.99 | 11.90 | 11.84 | 11.91 | 11.92 | 11.74 | 11.67 | 11.66 | 11.49 | 11.44 | 11.41 | 11.39 | 11.33 | 11.27 | 11.20 | 11.11 | 11.01 | 11.00 | 11.00 | -0.4% |
| Transportation          | 8.26  | 9.87  | 9.63  | 9.58  | 9.60  | 9.61  | 9.63  | 9.61  | 9.65  | 9.67  | 9.70  | 9.69  | 9.69  | 9.69  | 9.69  | 9.69  | 9.70  | 9.69  | 9.68  | 9.67  | 9.65  | 9.64  | 9.64  | 0.7%  |
| Primary Energy          | 8.24  | 9.86  | 9.61  | 9.57  | 9.58  | 9.59  | 9.61  | 9.59  | 9.63  | 9.65  | 9.68  | 9.67  | 9.66  | 9.67  | 9.66  | 9.67  | 9.68  | 9.67  | 9.66  | 9.65  | 9.63  | 9.62  | 9.62  | 0.7%  |
| Petroleum Products 2/   | 8.24  | 9.86  | 9.62  | 9.58  | 9.60  | 9.60  | 9.62  | 9.60  | 9.64  | 9.66  | 9.69  | 9.68  | 9.67  | 9.68  | 9.67  | 9.67  | 9.68  | 9.67  | 9.66  | 9.65  | 9.64  | 9.63  | 9.63  | 0.7%  |
| Distillate Fuel 6/      | 7.83  | 9.25  | 9.09  | 9.07  | 9.10  | 9.09  | 9.10  | 9.12  | 9.12  | 9.14  | 9.22  | 9.20  | 9.19  | 9.21  | 9.22  | 9.24  | 9.27  | 9.26  | 9.26  | 9.26  | 9.25  | 9.25  | 9.25  | 0.8%  |
| Jet Fuel 7/             | 4.61  | 5.81  | 5.65  | 5.67  | 5.75  | 5.76  | 5.80  | 5.87  | 5.90  | 5.94  | 6.05  | 6.02  | 5.98  | 5.98  | 5.97  | 5.99  | 6.06  | 6.05  | 6.04  | 6.03  | 6.02  | 6.01  | 6.01  | 1.2%  |
| Motor Gasoline 8/       | 9.21  | 11.05 | 10.73 | 10.67 | 10.68 | 10.69 | 10.71 | 10.67 | 10.72 | 10.74 | 10.74 | 10.73 | 10.73 | 10.74 | 10.73 | 10.73 | 10.73 | 10.73 | 10.72 | 10.71 | 10.71 | 10.70 | 10.70 | 0.7%  |
| Residual Fuel           | 2.14  | 3.06  | 3.23  | 3.38  | 3.56  | 3.70  | 3.81  | 3.96  | 4.09  | 4.13  | 4.17  | 4.19  | 4.21  | 4.23  | 4.27  | 4.28  | 4.28  | 4.30  | 4.34  | 4.47  | 4.38  | 4.43  | 4.43  | 3.4%  |
| Liquid Petroleum Gas 9/ | 10.50 | 12.69 | 12.49 | 12.44 | 12.38 | 12.41 | 12.31 | 12.30 | 12.27 | 12.27 | 12.28 | 12.23 | 12.21 | 12.30 | 12.25 | 12.20 | 12.24 | 12.23 | 12.24 | 12.27 | 12.29 | 12.34 | 12.34 | 0.7%  |
| Natural Gas 10/         | 4.81  | 5.29  | 5.28  | 5.33  | 5.51  | 5.70  | 5.88  | 6.09  | 6.34  | 6.53  | 6.68  | 6.80  | 6.90  | 6.96  | 7.01  | 7.03  | 7.05  | 7.08  | 7.10  | 7.10  | 7.11  | 7.13  | 7.13  | 1.8%  |
| Ethanol (E85) 11/       | 14.35 | 18.37 | 17.81 | 17.75 | 18.08 | 18.12 | 18.19 | 18.13 | 18.23 | 18.28 | 18.30 | 18.32 | 18.34 | 18.36 | 18.38 | 18.40 | 18.42 | 18.43 | 18.45 | 18.46 | 18.48 | 18.49 | 18.49 | 1.2%  |
| Methanol (M85) 12/      | 8.99  | 12.19 | 12.09 | 12.20 | 14.29 | 14.31 | 14.70 | 14.70 | 15.10 | 15.12 | 15.13 | 15.14 | 15.15 | 15.17 | 15.18 | 15.20 | 15.21 | 15.22 | 15.23 | 15.24 | 15.25 | 15.26 | 15.26 | 2.4%  |
| Electricity             | 16.24 | 16.20 | 15.99 | 15.89 | 15.87 | 15.72 | 15.41 | 15.37 | 15.44 | 15.23 | 15.16 | 15.12 | 14.96 | 14.92 | 14.84 | 14.69 | 14.57 | 14.47 | 14.36 | 14.24 | 14.18 | 14.11 | 14.11 | -0.6% |
| Average End-Use Energy  | 8.45  | 9.50  | 9.35  | 9.32  | 9.41  | 9.44  | 9.45  | 9.49  | 9.55  | 9.57  | 9.60  | 9.60  | 9.58  | 9.59  | 9.58  | 9.57  | 9.57  | 9.56  | 9.55  | 9.54  | 9.52  | 9.53  | 9.53  | 0.5%  |
| Primary Energy          | 8.14  | 9.33  | 9.16  | 9.14  | 9.21  | 9.23  | 9.25  | 9.27  | 9.33  | 9.35  | 9.38  | 9.38  | 9.36  | 9.37  | 9.36  | 9.36  | 9.36  | 9.35  | 9.34  | 9.34  | 9.32  | 9.33  | 9.33  | 0.6%  |
| Electricity             | 17.60 | 18.01 | 17.82 | 17.69 | 17.83 | 17.74 | 17.63 | 17.72 | 17.80 | 17.65 | 17.59 | 17.60 | 17.43 | 17.41 | 17.38 | 17.35 | 17.25 | 17.19 | 17.06 | 16.96 | 16.83 | 16.79 | 16.79 | -0.2% |
| Electric Generators 13/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Fossil Fuel Average     | 1.10  | 1.20  | 1.17  | 1.16  | 1.14  | 1.12  | 1.12  | 1.11  | 1.11  | 1.10  | 1.08  | 1.06  | 1.05  | 1.04  | 1.03  | 1.01  | 0.99  | 0.97  | 0.95  | 0.93  | 0.91  | 0.90  | 0.90  | -0.9% |
| Petroleum Products      | 3.51  | 5.52  | 5.40  | 5.39  | 5.44  | 5.46  | 5.48  | 5.52  | 5.56  | 5.60  | 5.69  | 5.63  | 5.59  | 5.58  | 5.57  | 5.57  | 5.59  | 5.57  | 5.59  | 5.64  | 5.68  | 5.73  | 5.73  | 2.2%  |
| Distillate Fuel         | 4.23  | 5.52  | 5.40  | 5.39  | 5.44  | 5.46  | 5.48  | 5.52  | 5.56  | 5.61  | 5.69  | 5.64  | 5.59  | 5.59  | 5.57  | 5.57  | 5.59  | 5.58  | 5.59  | 5.64  | 5.68  | 5.73  | 5.73  | 1.4%  |
| Residual Fuel           | 2.16  | 4.21  | 4.03  | 4.05  | 4.07  | 4.08  | 4.10  | 4.11  | 4.13  | 4.15  | 4.16  | 4.18  | 4.19  | 4.21  | 4.23  | 4.24  | 4.26  | 4.28  | 4.29  | 4.31  | 4.33  | 4.34  | 4.34  | 3.2%  |
| Natural Gas             | 2.21  | 2.49  | 2.53  | 2.63  | 2.84  | 3.05  | 3.24  | 3.36  | 3.47  | 3.59  | 3.65  | 3.69  | 3.73  | 3.74  | 3.73  | 3.71  | 3.70  | 3.68  | 3.65  | 3.61  | 3.58  | 3.58  | 3.58  | 2.2%  |
| Steam Coal              | 1.01  | 1.00  | 0.96  | 0.94  | 0.93  | 0.91  | 0.89  | 0.87  | 0.85  | 0.84  | 0.82  | 0.81  | 0.80  | 0.78  | 0.77  | 0.76  | 0.75  | 0.74  | 0.73  | 0.72  |       |       |       |       |

**Table 18. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**08 - Mountain**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |      |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------|
| Average Price to All Users 14/  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Petroleum Products 2/   | 7.47  | 9.13  | 8.92  | 8.89  | 8.92  | 8.94  | 8.96  | 8.96  | 8.99  | 9.02  | 9.07  | 9.05  | 9.04  | 9.05  | 9.05  | 9.05  | 9.07  | 9.06  | 9.06  | 9.07  | 9.07  | 9.07  | 0.9%      |      |
| Distillate Fuel   | 6.85  | 8.32  | 8.17  | 8.16  | 8.21  | 8.21  | 8.22  | 8.25  | 8.26  | 8.29  | 8.37  | 8.35  | 8.32  | 8.34  | 8.34  | 8.36  | 8.39  | 8.39  | 8.39  | 8.41  | 8.41  | 8.43  | 0.9%      |      |
| Jet Fuel  | 4.61  | 5.81  | 5.65  | 5.67  | 5.75  | 5.76  | 5.80  | 5.87  | 5.90  | 5.94  | 6.05  | 6.02  | 5.98  | 5.98  | 5.97  | 5.99  | 6.06  | 6.05  | 6.04  | 6.03  | 6.02  | 6.01  | 1.2%      |      |
| Liquefied Petroleum Gas   | 7.75  | 10.20 | 10.04 | 10.03 | 10.02 | 10.10 | 10.04 | 10.07 | 10.07 | 10.10 | 10.14 | 10.12 | 10.11 | 10.22 | 10.18 | 10.15 | 10.21 | 10.22 | 10.25 | 10.20 | 10.30 | 10.35 | 10.42     | 1.4% |
| Motor Gasoline 8/   | 9.21  | 11.05 | 10.73 | 10.67 | 10.68 | 10.69 | 10.71 | 10.67 | 10.72 | 10.74 | 10.74 | 10.73 | 10.73 | 10.73 | 10.73 | 10.73 | 10.73 | 10.73 | 10.72 | 10.71 | 10.71 | 10.70 | 0.7%      |      |
| Residual Fuel   | 2.68  | 3.15  | 2.98  | 3.00  | 3.01  | 3.03  | 3.04  | 3.06  | 3.07  | 3.09  | 3.11  | 3.12  | 3.14  | 3.15  | 3.17  | 3.18  | 3.20  | 3.22  | 3.23  | 3.25  | 3.27  | 3.28  | 0.9%      |      |
| Natural Gas   | 3.74  | 3.69  | 3.71  | 3.76  | 3.97  | 4.16  | 4.26  | 4.38  | 4.47  | 4.57  | 4.62  | 4.66  | 4.68  | 4.68  | 4.67  | 4.66  | 4.67  | 4.69  | 4.71  | 4.72  | 4.73  | 4.75  | 1.1%      |      |
| Coal  | 1.03  | 1.01  | 0.98  | 0.96  | 0.94  | 0.92  | 0.90  | 0.89  | 0.87  | 0.86  | 0.84  | 0.83  | 0.81  | 0.80  | 0.79  | 0.78  | 0.77  | 0.76  | 0.75  | 0.74  | 0.72  | 0.71  | -1.7%     |      |
| Ethanol (E85) 11/   | 14.35 | 18.37 | 17.81 | 17.75 | 18.08 | 18.12 | 18.19 | 18.13 | 18.23 | 18.28 | 18.30 | 18.32 | 18.34 | 18.36 | 18.38 | 18.40 | 18.42 | 18.43 | 18.45 | 18.46 | 18.48 | 18.49 | 1.2%      |      |
| Methanol (M85) 12/  | 8.99  | 12.19 | 12.09 | 12.20 | 14.29 | 14.31 | 14.70 | 14.70 | 15.10 | 15.12 | 15.13 | 15.14 | 15.15 | 15.17 | 15.18 | 15.20 | 15.21 | 15.22 | 15.23 | 15.24 | 15.25 | 15.26 | 2.4%      |      |
| Electricity   | 17.60 | 18.01 | 17.82 | 17.69 | 17.83 | 17.74 | 17.63 | 17.72 | 17.80 | 17.65 | 17.59 | 17.60 | 17.43 | 17.41 | 17.38 | 17.35 | 17.25 | 17.19 | 17.06 | 16.96 | 16.83 | 16.79 | -0.2%     |      |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Residential   | 6.50  | 7.20  | 7.30  | 7.45  | 7.69  | 7.89  | 8.01  | 8.19  | 8.39  | 8.56  | 8.66  | 8.80  | 8.85  | 8.96  | 9.02  | 9.10  | 9.17  | 9.28  | 9.31  | 9.40  | 9.49  | 9.63  | 1.8%      |      |
| Commercial  | 5.66  | 6.21  | 6.32  | 6.44  | 6.62  | 6.76  | 6.90  | 7.09  | 7.27  | 7.36  | 7.49  | 7.62  | 7.69  | 7.79  | 7.89  | 7.98  | 8.04  | 8.10  | 8.15  | 8.19  | 8.22  | 8.28  | 1.7%      |      |
| Industrial  | 4.98  | 5.70  | 5.66  | 5.75  | 5.97  | 6.12  | 6.26  | 6.41  | 6.55  | 6.62  | 6.69  | 6.78  | 6.79  | 6.88  | 6.98  | 7.10  | 7.22  | 7.28  | 7.36  | 7.45  | 7.54  | 7.65  | 2.0%      |      |
| Transportation  | 13.45 | 17.14 | 17.33 | 17.90 | 18.50 | 19.12 | 19.70 | 20.20 | 20.78 | 21.31 | 21.83 | 22.27 | 22.60 | 23.00 | 23.43 | 23.97 | 24.55 | 25.03 | 25.54 | 26.10 | 26.69 | 27.34 | 3.3%      |      |
| Total Non-Renewable Expend.   | 30.60 | 36.26 | 36.62 | 37.54 | 38.79 | 39.90 | 40.87 | 41.90 | 42.99 | 43.85 | 44.67 | 45.46 | 46.64 | 47.33 | 48.16 | 48.98 | 49.69 | 50.36 | 51.15 | 51.94 | 52.90 | 53.90 | 2.5%      |      |
| Trans. Renewable Expend.  | 0.00  | 0.01  | 0.01  | 0.02  | 0.03  | 0.03  | 0.04  | 0.05  | 0.05  | 0.06  | 0.07  | 0.07  | 0.08  | 0.08  | 0.09  | 0.09  | 0.10  | 0.10  | 0.11  | 0.11  | 0.11  | 0.11  | 19.0%     |      |
| Total Expenditures  | 30.60 | 36.27 | 36.63 | 37.56 | 38.81 | 39.93 | 40.91 | 41.94 | 43.04 | 43.91 | 44.73 | 45.53 | 46.02 | 46.72 | 47.42 | 48.25 | 49.08 | 49.79 | 50.47 | 51.25 | 52.06 | 53.02 | 2.5%      |      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 19. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**09 - Pacific**

|                                | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |      |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------|
| <b>Residential</b>             | 13.73 | 13.79 | 13.62 | 13.54 | 13.67 | 13.63 | 13.51 | 13.45 | 13.52 | 13.55 | 13.49 | 13.43 | 13.40 | 13.38 | 13.34 | 13.24 | 13.17 | 13.12 | 13.04 | 12.98 | 12.96 | 12.92 | -0.3%     |      |
| Primary Energy 1/              | 6.77  | 7.08  | 7.10  | 7.12  | 7.17  | 7.20  | 7.22  | 7.24  | 7.24  | 7.23  | 7.21  | 7.17  | 7.14  | 7.10  | 7.05  | 6.98  | 6.93  | 6.87  | 6.83  | 6.79  | 6.77  | 6.77  | 0.0%      |      |
| Petroleum Products 2/          | 9.10  | 11.14 | 11.15 | 11.34 | 11.59 | 11.74 | 11.96 | 12.09 | 12.18 | 12.22 | 12.29 | 12.34 | 12.40 | 12.41 | 12.45 | 12.47 | 12.55 | 12.58 | 12.60 | 12.62 | 12.72 | 12.73 | 1.5%      |      |
| Distillate Fuel                | 6.59  | 8.09  | 7.85  | 7.83  | 7.89  | 7.95  | 8.01  | 8.04  | 7.99  | 7.94  | 7.93  | 7.95  | 8.07  | 8.00  | 7.97  | 7.92  | 7.89  | 7.92  | 7.93  | 7.93  | 7.93  | 7.92  | 7.93      | 0.8% |
| Liquefied Petroleum Gas        | 11.61 | 13.90 | 14.01 | 14.22 | 14.50 | 14.59 | 14.81 | 14.90 | 15.00 | 15.02 | 15.04 | 15.10 | 15.11 | 15.16 | 15.23 | 15.28 | 15.40 | 15.40 | 15.39 | 15.40 | 15.52 | 15.51 | 1.3%      |      |
| Natural Gas                    | 6.58  | 6.72  | 6.73  | 6.74  | 6.76  | 6.78  | 6.79  | 6.79  | 6.79  | 6.77  | 6.74  | 6.69  | 6.65  | 6.61  | 6.55  | 6.48  | 6.41  | 6.35  | 6.30  | 6.26  | 6.23  | 6.24  | -0.2%     |      |
| Electricity                    | 23.24 | 23.03 | 22.66 | 22.51 | 22.88 | 22.84 | 22.58 | 22.50 | 22.77 | 22.99 | 22.98 | 22.97 | 22.94 | 22.97 | 22.95 | 22.80 | 22.71 | 22.67 | 22.54 | 22.44 | 22.37 | 22.25 | -0.2%     |      |
| <b>Commercial</b>              | 15.50 | 15.69 | 15.51 | 14.84 | 14.86 | 14.73 | 14.48 | 14.29 | 14.26 | 14.23 | 14.28 | 14.36 | 14.43 | 14.51 | 14.55 | 14.50 | 14.43 | 14.36 | 14.29 | 14.18 | 14.11 | 14.02 | -0.5%     |      |
| Primary Energy 1/              | 5.46  | 5.80  | 5.81  | 5.84  | 5.90  | 5.93  | 5.97  | 6.00  | 6.01  | 6.02  | 6.01  | 5.99  | 5.97  | 5.93  | 5.89  | 5.84  | 5.79  | 5.74  | 5.71  | 5.68  | 5.67  | 5.67  | 0.2%      |      |
| Petroleum Products 2/          | 5.40  | 7.19  | 7.00  | 7.02  | 7.13  | 7.22  | 7.35  | 7.38  | 7.36  | 7.33  | 7.33  | 7.27  | 7.30  | 7.20  | 7.12  | 7.04  | 6.99  | 6.97  | 6.95  | 6.91  | 6.90  | 6.87  | 1.1%      |      |
| Distillate Fuel                | 3.88  | 5.85  | 5.61  | 5.59  | 5.65  | 5.71  | 5.77  | 5.80  | 5.75  | 5.71  | 5.69  | 5.71  | 5.83  | 5.77  | 5.73  | 5.68  | 5.65  | 5.68  | 5.70  | 5.69  | 5.69  | 5.69  | 1.8%      |      |
| Residual Fuel                  | 1.75  | 3.25  | 3.08  | 3.10  | 3.11  | 3.13  | 3.16  | 3.17  | 3.19  | 3.21  | 3.23  | 3.25  | 3.26  | 3.28  | 3.30  | 3.32  | 3.34  | 3.35  | 3.37  | 3.39  | 3.41  | 3.42  | 3.1%      |      |
| Natural Gas 3/                 | 5.56  | 5.79  | 5.82  | 5.86  | 5.91  | 5.94  | 5.97  | 6.00  | 6.02  | 6.03  | 6.02  | 6.00  | 5.98  | 5.95  | 5.91  | 5.85  | 5.80  | 5.76  | 5.72  | 5.69  | 5.68  | 5.69  | 0.1%      |      |
| Electricity                    | 23.18 | 22.79 | 22.42 | 21.15 | 21.10 | 20.81 | 20.30 | 19.90 | 19.81 | 19.73 | 19.81 | 19.93 | 20.07 | 20.21 | 20.31 | 20.26 | 20.19 | 20.10 | 20.01 | 19.84 | 19.71 | 19.56 | -0.8%     |      |
| <b>Industrial 4/</b>           | 5.09  | 5.72  | 5.69  | 5.68  | 5.75  | 5.75  | 5.74  | 5.69  | 5.73  | 5.71  | 5.73  | 5.74  | 5.75  | 5.75  | 5.74  | 5.71  | 5.68  | 5.66  | 5.64  | 5.61  | 5.60  | 5.61  | 0.4%      |      |
| Primary Energy                 | 3.18  | 3.91  | 3.91  | 4.07  | 4.14  | 4.20  | 4.27  | 4.28  | 4.34  | 4.36  | 4.38  | 4.37  | 4.39  | 4.38  | 4.36  | 4.33  | 4.31  | 4.29  | 4.29  | 4.27  | 4.28  | 4.29  | 1.4%      |      |
| Petroleum Products 2/          | 3.89  | 5.11  | 5.02  | 5.27  | 5.34  | 5.39  | 5.46  | 5.41  | 5.49  | 5.47  | 5.50  | 5.47  | 5.50  | 5.47  | 5.46  | 5.42  | 5.41  | 5.39  | 5.39  | 5.37  | 5.37  | 5.36  | 1.5%      |      |
| Distillate Fuel                | 4.22  | 6.27  | 6.03  | 6.01  | 6.07  | 6.13  | 6.20  | 6.22  | 6.17  | 6.13  | 6.11  | 6.13  | 6.26  | 6.19  | 6.15  | 6.10  | 6.07  | 6.10  | 6.12  | 6.11  | 6.11  | 6.12  | 1.7%      |      |
| Liquefied Petroleum Gas        | 8.57  | 10.42 | 10.52 | 10.74 | 11.01 | 11.10 | 11.33 | 11.41 | 11.51 | 11.53 | 11.56 | 11.62 | 11.63 | 11.67 | 11.75 | 11.79 | 11.92 | 11.91 | 11.91 | 11.92 | 12.04 | 12.03 | 1.6%      |      |
| Residual Fuel                  | 2.44  | 3.37  | 3.20  | 3.22  | 3.23  | 3.25  | 3.28  | 3.30  | 3.31  | 3.33  | 3.35  | 3.37  | 3.38  | 3.40  | 3.42  | 3.44  | 3.46  | 3.47  | 3.49  | 3.51  | 3.53  | 3.54  | 1.7%      |      |
| Natural Gas 5/                 | 2.59  | 2.83  | 2.91  | 3.00  | 3.12  | 3.21  | 3.30  | 3.37  | 3.43  | 3.47  | 3.49  | 3.50  | 3.51  | 3.51  | 3.50  | 3.48  | 3.46  | 3.45  | 3.44  | 3.43  | 3.45  | 3.49  | 1.4%      |      |
| Metallurgical Coal             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |      |
| Steam Coal                     | 1.87  | 1.84  | 1.84  | 1.82  | 1.82  | 1.79  | 1.78  | 1.76  | 1.75  | 1.75  | 1.71  | 1.72  | 1.71  | 1.69  | 1.68  | 1.66  | 1.65  | 1.63  | 1.62  | 1.60  | 1.58  | 1.57  | -0.8%     |      |
| Electricity                    | 14.33 | 14.24 | 14.02 | 13.08 | 13.00 | 12.68 | 12.30 | 11.98 | 11.85 | 11.67 | 11.67 | 11.71 | 11.69 | 11.72 | 11.72 | 11.63 | 11.57 | 11.49 | 11.42 | 11.27 | 11.18 | 11.11 | -1.2%     |      |
| <b>Transportation</b>          | 7.56  | 8.91  | 8.72  | 8.76  | 8.84  | 9.01  | 9.26  | 9.24  | 9.33  | 9.38  | 9.38  | 9.35  | 9.35  | 9.31  | 9.28  | 9.26  | 9.25  | 9.23  | 9.21  | 9.18  | 9.15  | 9.14  | 0.9%      |      |
| Primary Energy                 | 7.53  | 8.89  | 8.70  | 8.74  | 8.82  | 8.99  | 9.24  | 9.22  | 9.31  | 9.36  | 9.36  | 9.33  | 9.32  | 9.29  | 9.26  | 9.23  | 9.23  | 9.21  | 9.19  | 9.16  | 9.13  | 9.11  | 0.9%      |      |
| Petroleum Products 2/          | 7.53  | 8.90  | 8.71  | 8.74  | 8.82  | 8.99  | 9.24  | 9.22  | 9.32  | 9.36  | 9.36  | 9.33  | 9.32  | 9.29  | 9.25  | 9.23  | 9.22  | 9.20  | 9.18  | 9.15  | 9.12  | 9.11  | 0.9%      |      |
| Distillate Fuel 6/             | 8.33  | 9.70  | 9.48  | 9.52  | 9.44  | 9.55  | 9.66  | 9.69  | 9.83  | 9.88  | 9.87  | 9.86  | 9.71  | 9.66  | 9.63  | 9.59  | 9.50  | 9.50  | 9.45  | 9.35  | 9.32  | 9.28  | 0.5%      |      |
| Jet Fuel 7/                    | 4.16  | 5.33  | 5.19  | 5.29  | 5.21  | 5.34  | 5.51  | 5.57  | 5.83  | 6.03  | 6.14  | 6.13  | 6.14  | 6.13  | 6.11  | 6.16  | 6.25  | 6.25  | 6.25  | 6.24  | 6.24  | 6.24  | 1.9%      |      |
| Motor Gasoline 8/              | 9.34  | 10.88 | 10.68 | 10.72 | 10.96 | 11.22 | 11.62 | 11.59 | 11.64 | 11.67 | 11.66 | 11.65 | 11.70 | 11.69 | 11.68 | 11.66 | 11.66 | 11.65 | 11.66 | 11.65 | 11.63 | 11.62 | 1.0%      |      |
| Residual Fuel                  | 2.43  | 3.64  | 3.46  | 3.48  | 3.50  | 3.52  | 3.55  | 3.57  | 3.58  | 3.60  | 3.62  | 3.64  | 3.66  | 3.68  | 3.70  | 3.72  | 3.74  | 3.75  | 3.77  | 3.79  | 3.81  | 3.83  | 2.1%      |      |
| Liquid Petroleum Gas 9/        | 10.48 | 12.22 | 12.30 | 12.49 | 12.73 | 12.80 | 12.99 | 13.05 | 13.12 | 13.11 | 13.11 | 13.14 | 13.12 | 13.14 | 13.19 | 13.21 | 13.31 | 13.27 | 13.24 | 13.21 | 13.30 | 13.26 | 1.1%      |      |
| Natural Gas 10/                | 5.10  | 5.68  | 5.69  | 5.77  | 5.91  | 6.07  | 6.25  | 6.46  | 6.68  | 6.85  | 6.98  | 7.09  | 7.17  | 7.23  | 7.26  | 7.27  | 7.26  | 7.25  | 7.24  | 7.23  | 7.24  | 7.27  | 1.6%      |      |
| Ethanol (E85) 11/              | 14.35 | 16.76 | 16.35 | 16.35 | 17.82 | 17.91 | 18.05 | 18.02 | 18.10 | 18.15 | 18.17 | 18.19 | 18.21 | 18.24 | 18.25 | 18.27 | 18.30 | 18.31 | 18.33 | 18.34 | 18.36 | 18.37 | 1.1%      |      |
| Methanol (M85) 12/             | 8.99  | 13.07 | 12.71 | 12.75 | 12.78 | 12.85 | 13.34 | 13.35 | 13.37 | 13.38 | 13.39 | 13.40 | 13.42 | 13.44 | 13.44 | 13.46 | 13.47 | 13.48 | 13.49 | 13.50 | 13.51 | 13.51 | 1.9%      |      |
| Electricity                    | 17.29 | 16.78 | 16.53 | 16.36 | 16.26 | 15.95 | 15.60 | 15.47 | 15.54 | 14.98 | 14.97 | 15.05 | 14.94 | 15.00 | 14.93 | 14.87 | 14.87 | 14.97 | 14.94 | 14.78 | 14.78 | 14.70 | -0.7%     |      |
| <b>Average End-Use Energy</b>  | 8.50  | 9.41  | 9.27  | 9.21  | 9.29  | 9.36  | 9.44  | 9.39  | 9.47  | 9.49  | 9.50  | 9.49  | 9.50  | 9.48  | 9.46  | 9.42  | 9.40  | 9.37  | 9.33  | 9.29  | 9.26  | 9.24  | 0.4%      |      |
| Primary Energy                 | 7.87  | 8.87  | 8.73  | 8.72  | 8.80  | 8.90  | 9.03  | 8.99  | 9.08  | 9.11  | 9.12  | 9.11  | 9.11  | 9.10  | 9.07  | 9.04  | 9.02  | 9.00  | 8.98  | 8.94  | 8.91  | 8.90  | 0.6%      |      |
| Electricity                    | 20.59 | 20.38 | 20.07 | 19.26 | 19.32 | 19.10 | 18.70 | 18.43 | 18.44 | 18.42 | 18.45 | 18.51 | 18.54 | 18.61 | 18.62 | 18.51 | 18.43 | 18.36 | 18.26 | 18.11 | 18.01 | 17.89 | -0.6%     |      |
| <b>Electric Generators 13/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Fossil Fuel Average            | 2.27  | 2.73  | 2.73  | 2.76  | 2.82  | 2.85  | 2.89  | 2.96  | 3.01  | 3.06  | 3.09  | 3.13  | 3.15  | 3.16  | 3.17  | 3.16  | 3.16  | 3.16  | 3.16  | 3.16  | 3.17  | 3.22  | 1.6%      |      |
| Petroleum Products             | 2.65  | 4.25  | 4.06  | 4.07  | 4.09  | 4.11  | 4.14  | 4.16  | 4.18  | 4.20  | 4.21  | 4.21  | 4.23  | 4.23  | 4.23  | 4.23  | 4.24  | 4.24  | 4.25  | 4.26  | 4.27  | 4.28  | 2.2%      |      |
| Distillate Fuel                | 2.96  | 5.46  | 5.22  | 5.20  | 5.26  | 5.32  | 5.38  | 5.40  | 5.35  | 5.31  | 5.30  | 5.31  | 5.44  | 5.37  | 5.34  | 5.28  | 5.26  | 5.29  | 5.30  | 5.29  | 5.29  | 5.30  | 2.7%      |      |
| Residual Fuel                  | 2.60  | 4.08  | 3.91  | 3.93  | 3.95  | 3.96  | 3.99  | 4.01  | 4.02  | 4.04  | 4.06  | 4.08  | 4.09  | 4.11  | 4.13  | 4.15  | 4.17  | 4.18  | 4.20  | 4.22  | 4.24  | 4.25  | 2.3%      |      |
| Natural Gas                    | 2.57  | 2.86  | 2.90  | 2.96  | 3.03  | 3.09  | 3.14  | 3.21  | 3.27  | 3.32  | 3.35  | 3.38  | 3.40  | 3.41  | 3.41  | 3.39  | 3.39  | 3.38  | 3.38  | 3.38  | 3.40  | 3.45  | 1.4%      |      |
| Steam Coal                     | 1.38  | 1.37  | 1.34  | 1.32  | 1.30  | 1.28  | 1.27  | 1.26  | 1.25  | 1.24  | 1.23  | 1.22  | 1.21  | 1.20  | 1.19  | 1.18  | 1.17  | 1.16  | 1.15  | 1.13  | 1.12  | 1.11  | -1.0%     |      |

**Table 19. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**09 - Pacific**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----------|
| Average Price to All Users 14/  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |           |
| Petroleum Products 2/   | 6.93  | 8.33  | 8.16  | 8.24  | 8.33  | 8.48  | 8.71  | 8.69  | 8.80  | 8.83  | 8.85  | 8.82  | 8.82  | 8.79  | 8.77  | 8.75  | 8.74   | 8.73   | 8.72   | 8.69   | 8.67   | 8.66   | 1.0%      |
| Distillate Fuel   | 7.53  | 9.08  | 8.86  | 8.88  | 8.84  | 8.93  | 9.03  | 9.06  | 9.16  | 9.20  | 9.19  | 9.19  | 9.09  | 9.03  | 9.01  | 8.96  | 8.89   | 8.89   | 8.86   | 8.77   | 8.75   | 8.72   | 0.7%      |
| Jet Fuel  | 4.16  | 5.33  | 5.19  | 5.29  | 5.21  | 5.34  | 5.51  | 5.57  | 5.83  | 6.03  | 6.14  | 6.13  | 6.14  | 6.13  | 6.11  | 6.16  | 6.25   | 6.25   | 6.25   | 6.24   | 6.24   | 6.24   | 1.9%      |
| Liquefied Petroleum Gas   | 10.05 | 12.17 | 12.21 | 12.41 | 12.83 | 12.95 | 13.18 | 13.28 | 13.35 | 13.32 | 13.33 | 13.41 | 13.41 | 13.46 | 13.53 | 13.57 | 13.70  | 13.69  | 13.68  | 13.69  | 13.81  | 13.80  | 1.4%      |
| Motor Gasoline 8/   | 9.35  | 10.88 | 10.69 | 10.72 | 10.96 | 11.22 | 11.62 | 11.59 | 11.65 | 11.67 | 11.66 | 11.65 | 11.70 | 11.69 | 11.68 | 11.66 | 11.66  | 11.65  | 11.66  | 11.65  | 11.63  | 11.63  | 1.0%      |
| Residual Fuel   | 2.47  | 3.71  | 3.53  | 3.55  | 3.57  | 3.59  | 3.61  | 3.62  | 3.63  | 3.64  | 3.66  | 3.67  | 3.69  | 3.71  | 3.73  | 3.75  | 3.77   | 3.78   | 3.80   | 3.82   | 3.84   | 3.86   | 2.0%      |
| Natural Gas   | 4.02  | 4.09  | 4.16  | 4.21  | 4.27  | 4.34  | 4.39  | 4.43  | 4.47  | 4.49  | 4.50  | 4.49  | 4.48  | 4.47  | 4.44  | 4.40  | 4.37   | 4.35   | 4.33   | 4.32   | 4.33   | 4.36   | 0.4%      |
| Coal  | 1.49  | 1.52  | 1.50  | 1.48  | 1.45  | 1.43  | 1.42  | 1.41  | 1.40  | 1.39  | 1.37  | 1.37  | 1.36  | 1.35  | 1.34  | 1.33  | 1.32   | 1.31   | 1.30   | 1.28   | 1.27   | 1.26   | -0.8%     |
| Ethanol (E85) 11/   | 14.35 | 16.76 | 16.35 | 16.35 | 17.82 | 17.91 | 18.05 | 18.02 | 18.10 | 18.15 | 18.17 | 18.19 | 18.21 | 18.24 | 18.25 | 18.27 | 18.30  | 18.31  | 18.33  | 18.34  | 18.36  | 18.37  | 1.1%      |
| Methanol (M85) 12/  | 8.99  | 13.07 | 12.71 | 12.75 | 12.78 | 12.85 | 13.34 | 13.35 | 13.37 | 13.38 | 13.39 | 13.40 | 13.42 | 13.44 | 13.44 | 13.46 | 13.47  | 13.48  | 13.49  | 13.50  | 13.51  | 13.51  | 1.9%      |
| Electricity   | 20.59 | 20.38 | 20.07 | 19.26 | 19.32 | 19.10 | 18.70 | 18.43 | 18.44 | 18.42 | 18.45 | 18.51 | 18.54 | 18.61 | 18.62 | 18.51 | 18.43  | 18.36  | 18.26  | 18.11  | 18.01  | 17.89  | -0.6%     |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |           |
| Residential   | 14.90 | 15.72 | 15.76 | 15.92 | 16.33 | 16.63 | 16.76 | 17.01 | 17.40 | 17.83 | 18.06 | 18.35 | 18.49 | 18.70 | 18.80 | 18.90 | 19.03  | 19.20  | 19.24  | 19.35  | 19.50  | 19.68  | 1.3%      |
| Commercial  | 13.24 | 13.99 | 14.01 | 13.61 | 13.75 | 13.78 | 13.71 | 13.70 | 13.83 | 13.97 | 14.19 | 14.42 | 14.66 | 14.88 | 15.06 | 15.15 | 15.20  | 15.22  | 15.22  | 15.16  | 15.13  | 15.06  | 0.6%      |
| Industrial  | 9.23  | 10.10 | 10.08 | 10.09 | 10.37 | 10.52 | 10.65 | 10.68 | 10.85 | 10.93 | 11.05 | 11.20 | 11.32 | 11.47 | 11.63 | 11.76 | 11.89  | 11.94  | 12.03  | 12.08  | 12.19  | 12.31  | 1.3%      |
| Transportation  | 31.42 | 38.62 | 38.58 | 39.51 | 40.67 | 42.44 | 44.62 | 45.58 | 47.06 | 48.31 | 49.29 | 50.20 | 51.02 | 51.77 | 52.59 | 53.59 | 54.58  | 55.34  | 56.04  | 56.70  | 57.31  | 58.00  | 2.8%      |
| Total Non-Renewable Expend.   | 68.79 | 78.43 | 78.42 | 79.13 | 81.12 | 83.37 | 85.74 | 86.97 | 89.15 | 91.04 | 92.59 | 94.18 | 95.48 | 96.82 | 98.09 | 99.40 | 100.69 | 101.70 | 102.53 | 103.29 | 104.13 | 105.06 | 1.9%      |
| Trans. Renewable Expend.  | 0.01  | 0.02  | 0.03  | 0.04  | 0.06  | 0.08  | 0.09  | 0.11  | 0.12  | 0.13  | 0.15  | 0.16  | 0.17  | 0.18  | 0.19  | 0.20  | 0.21   | 0.21   | 0.22   | 0.22   | 0.23   | 0.23   | 17.5%     |
| Total Expenditures  | 68.79 | 78.46 | 78.46 | 79.17 | 81.18 | 83.45 | 85.84 | 87.08 | 89.27 | 91.18 | 92.74 | 94.34 | 95.65 | 97.00 | 98.28 | 99.60 | 100.90 | 101.91 | 102.75 | 103.51 | 104.36 | 105.29 | 2.0%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 20. Energy Prices by Sector and Source (1 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**United States Averages**

|                                | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| <b>Residential</b>             | 13.30 | 13.30 | 13.17 | 13.07 | 13.07 | 13.08 | 13.03 | 13.08 | 13.12 | 13.12 | 13.05 | 13.09 | 13.02 | 13.00 | 13.01 | 13.05 | 13.08 | 13.07 | 13.08 | 13.10 | 13.09 | 13.10 | -0.1%     |
| Primary Energy 1/              | 6.75  | 7.22  | 7.16  | 7.13  | 7.12  | 7.13  | 7.15  | 7.16  | 7.17  | 7.17  | 7.15  | 7.11  | 7.09  | 7.07  | 7.04  | 7.01  | 6.99  | 6.96  | 6.94  | 6.93  | 6.92  | 6.92  | 0.1%      |
| Petroleum Products 2/          | 7.48  | 9.45  | 9.33  | 9.35  | 9.41  | 9.46  | 9.48  | 9.54  | 9.58  | 9.64  | 9.73  | 9.73  | 9.74  | 9.80  | 9.81  | 9.82  | 9.88  | 9.89  | 9.91  | 9.95  | 9.99  | 10.04 | 1.3%      |
| Distillate Fuel                | 6.12  | 7.58  | 7.46  | 7.45  | 7.51  | 7.53  | 7.55  | 7.59  | 7.62  | 7.67  | 7.75  | 7.74  | 7.73  | 7.76  | 7.77  | 7.80  | 7.82  | 7.83  | 7.82  | 7.84  | 7.86  | 7.88  | 1.2%      |
| Liquefied Petroleum Gas        | 10.42 | 13.18 | 13.01 | 13.02 | 13.02 | 13.10 | 13.06 | 13.09 | 13.12 | 13.16 | 13.21 | 13.21 | 13.22 | 13.32 | 13.30 | 13.28 | 13.37 | 13.38 | 13.42 | 13.48 | 13.55 | 13.62 | 1.2%      |
| Natural Gas                    | 6.60  | 6.68  | 6.64  | 6.60  | 6.59  | 6.60  | 6.62  | 6.64  | 6.65  | 6.63  | 6.60  | 6.57  | 6.54  | 6.52  | 6.49  | 6.46  | 6.43  | 6.40  | 6.39  | 6.37  | 6.36  | 6.36  | -0.2%     |
| Electricity                    | 23.58 | 23.05 | 22.69 | 22.35 | 22.25 | 22.17 | 21.90 | 21.92 | 21.92 | 21.85 | 21.59 | 21.67 | 21.47 | 21.39 | 21.36 | 21.45 | 21.50 | 21.44 | 21.44 | 21.46 | 21.38 | 21.33 | -0.5%     |
| <b>Commercial</b>              | 13.13 | 13.08 | 12.86 | 12.60 | 12.53 | 12.46 | 12.32 | 12.34 | 12.31 | 12.23 | 12.10 | 12.14 | 12.03 | 11.98 | 11.98 | 12.01 | 12.04 | 12.02 | 12.02 | 12.02 | 11.98 | 12.00 | -0.4%     |
| Primary Energy 1/              | 5.06  | 5.49  | 5.44  | 5.42  | 5.43  | 5.46  | 5.49  | 5.52  | 5.55  | 5.56  | 5.55  | 5.54  | 5.53  | 5.53  | 5.52  | 5.51  | 5.51  | 5.50  | 5.50  | 5.50  | 5.51  | 5.53  | 0.4%      |
| Petroleum Products 2/          | 4.55  | 6.20  | 6.04  | 6.04  | 6.08  | 6.11  | 6.12  | 6.15  | 6.18  | 6.22  | 6.28  | 6.27  | 6.27  | 6.31  | 6.31  | 6.32  | 6.36  | 6.37  | 6.38  | 6.42  | 6.45  | 6.49  | 1.6%      |
| Distillate Fuel                | 3.93  | 5.43  | 5.30  | 5.29  | 5.35  | 5.36  | 5.38  | 5.42  | 5.45  | 5.50  | 5.57  | 5.56  | 5.55  | 5.58  | 5.58  | 5.60  | 5.63  | 5.63  | 5.63  | 5.67  | 5.70  | 5.73  | 1.7%      |
| Residual Fuel                  | 2.49  | 3.84  | 3.66  | 3.66  | 3.67  | 3.69  | 3.70  | 3.71  | 3.72  | 3.72  | 3.73  | 3.74  | 3.74  | 3.75  | 3.76  | 3.78  | 3.79  | 3.81  | 3.82  | 3.84  | 3.86  | 3.87  | 2.0%      |
| Natural Gas 3/                 | 5.26  | 5.47  | 5.44  | 5.42  | 5.43  | 5.45  | 5.48  | 5.52  | 5.55  | 5.56  | 5.54  | 5.53  | 5.52  | 5.51  | 5.50  | 5.49  | 5.48  | 5.47  | 5.47  | 5.47  | 5.47  | 5.50  | 0.2%      |
| Electricity                    | 21.76 | 21.19 | 20.71 | 20.13 | 19.91 | 19.69 | 19.31 | 19.26 | 19.12 | 18.90 | 18.60 | 18.65 | 18.40 | 18.28 | 18.25 | 18.32 | 18.37 | 18.30 | 18.29 | 18.28 | 18.18 | 18.17 | -0.8%     |
| <b>Industrial 4/</b>           | 4.88  | 5.52  | 5.42  | 5.39  | 5.38  | 5.39  | 5.38  | 5.41  | 5.45  | 5.47  | 5.46  | 5.48  | 5.45  | 5.47  | 5.48  | 5.51  | 5.55  | 5.55  | 5.57  | 5.60  | 5.62  | 5.65  | 0.7%      |
| Primary Energy                 | 3.41  | 4.16  | 4.10  | 4.11  | 4.13  | 4.16  | 4.18  | 4.21  | 4.26  | 4.29  | 4.32  | 4.32  | 4.32  | 4.36  | 4.37  | 4.39  | 4.42  | 4.43  | 4.45  | 4.48  | 4.51  | 4.55  | 1.3%      |
| Petroleum Products 2/          | 4.58  | 5.92  | 5.77  | 5.78  | 5.79  | 5.81  | 5.79  | 5.80  | 5.83  | 5.86  | 5.90  | 5.88  | 5.86  | 5.92  | 5.92  | 5.93  | 5.97  | 5.98  | 6.00  | 6.04  | 6.07  | 6.11  | 1.3%      |
| Distillate Fuel                | 4.02  | 5.53  | 5.40  | 5.39  | 5.45  | 5.47  | 5.49  | 5.53  | 5.56  | 5.60  | 5.68  | 5.66  | 5.65  | 5.66  | 5.66  | 5.67  | 5.71  | 5.71  | 5.73  | 5.78  | 5.83  | 5.89  | 1.7%      |
| Liquefied Petroleum Gas        | 7.11  | 8.01  | 7.84  | 7.82  | 7.79  | 7.85  | 7.79  | 7.80  | 7.81  | 7.86  | 7.89  | 7.87  | 7.86  | 7.98  | 7.96  | 7.93  | 8.00  | 8.02  | 8.06  | 8.12  | 8.17  | 8.25  | 0.7%      |
| Residual Fuel                  | 2.49  | 3.31  | 3.14  | 3.14  | 3.15  | 3.16  | 3.17  | 3.19  | 3.20  | 3.21  | 3.22  | 3.23  | 3.24  | 3.25  | 3.27  | 3.28  | 3.30  | 3.32  | 3.33  | 3.35  | 3.36  | 3.38  | 1.4%      |
| Natural Gas 5/                 | 2.66  | 2.89  | 2.88  | 2.91  | 2.95  | 3.00  | 3.08  | 3.15  | 3.21  | 3.25  | 3.27  | 3.28  | 3.30  | 3.32  | 3.34  | 3.36  | 3.38  | 3.40  | 3.42  | 3.44  | 3.46  | 3.50  | 1.3%      |
| Metallurgical Coal             | 1.72  | 1.75  | 1.73  | 1.71  | 1.69  | 1.68  | 1.66  | 1.65  | 1.64  | 1.62  | 1.61  | 1.60  | 1.59  | 1.57  | 1.57  | 1.56  | 1.56  | 1.54  | 1.53  | 1.52  | 1.51  | 1.50  | -0.6%     |
| Steam Coal                     | 1.45  | 1.40  | 1.38  | 1.36  | 1.35  | 1.34  | 1.32  | 1.31  | 1.30  | 1.29  | 1.28  | 1.26  | 1.25  | 1.24  | 1.23  | 1.22  | 1.21  | 1.20  | 1.19  | 1.18  | 1.17  | 1.16  | -1.0%     |
| Electricity                    | 13.09 | 13.05 | 12.81 | 12.46 | 12.29 | 12.14 | 11.92 | 11.92 | 11.89 | 11.79 | 11.60 | 11.66 | 11.46 | 11.36 | 11.33 | 11.38 | 11.43 | 11.35 | 11.36 | 11.34 | 11.27 | 11.27 | -0.7%     |
| <b>Transportation</b>          | 7.53  | 9.25  | 9.00  | 8.97  | 9.00  | 9.03  | 9.08  | 9.06  | 9.10  | 9.13  | 9.14  | 9.13  | 9.12  | 9.12  | 9.11  | 9.10  | 9.11  | 9.09  | 9.08  | 9.07  | 9.05  | 9.04  | 0.8%      |
| Primary Energy                 | 7.51  | 9.24  | 8.98  | 8.95  | 8.98  | 9.01  | 9.06  | 9.04  | 9.08  | 9.11  | 9.12  | 9.11  | 9.10  | 9.10  | 9.09  | 9.08  | 9.09  | 9.07  | 9.06  | 9.05  | 9.03  | 9.02  | 0.8%      |
| Petroleum Products 2/          | 7.51  | 9.24  | 8.98  | 8.95  | 8.98  | 9.02  | 9.06  | 9.04  | 9.09  | 9.11  | 9.12  | 9.11  | 9.10  | 9.10  | 9.08  | 9.08  | 9.08  | 9.07  | 9.06  | 9.04  | 9.02  | 9.01  | 0.8%      |
| Distillate Fuel 6/             | 7.51  | 9.05  | 8.88  | 8.86  | 8.88  | 8.88  | 8.90  | 8.92  | 8.94  | 8.96  | 9.03  | 9.01  | 8.98  | 9.00  | 8.99  | 9.01  | 9.02  | 9.01  | 9.00  | 8.99  | 8.97  | 8.97  | 0.8%      |
| Jet Fuel 7/                    | 4.06  | 5.35  | 5.19  | 5.23  | 5.27  | 5.32  | 5.39  | 5.46  | 5.55  | 5.64  | 5.74  | 5.74  | 5.74  | 5.76  | 5.77  | 5.81  | 5.89  | 5.90  | 5.90  | 5.91  | 5.91  | 5.91  | 1.7%      |
| Motor Gasoline 8/              | 8.54  | 10.51 | 10.20 | 10.16 | 10.21 | 10.26 | 10.33 | 10.29 | 10.34 | 10.37 | 10.36 | 10.35 | 10.36 | 10.36 | 10.35 | 10.35 | 10.35 | 10.34 | 10.33 | 10.32 | 10.31 | 10.30 | 0.9%      |
| Residual Fuel                  | 2.22  | 3.24  | 3.06  | 3.08  | 3.09  | 3.11  | 3.13  | 3.15  | 3.16  | 3.18  | 3.20  | 3.21  | 3.23  | 3.25  | 3.26  | 3.28  | 3.30  | 3.32  | 3.33  | 3.35  | 3.37  | 3.39  | 1.9%      |
| Liquid Petroleum Gas 9/        | 11.01 | 13.67 | 13.52 | 13.52 | 13.52 | 13.56 | 13.52 | 13.51 | 13.50 | 13.50 | 13.51 | 13.48 | 13.45 | 13.51 | 13.47 | 13.41 | 13.47 | 13.44 | 13.44 | 13.45 | 13.48 | 13.50 | 0.9%      |
| Natural Gas 10/                | 5.83  | 6.31  | 6.23  | 6.23  | 6.28  | 6.39  | 6.54  | 6.71  | 6.90  | 7.04  | 7.13  | 7.22  | 7.30  | 7.36  | 7.40  | 7.43  | 7.45  | 7.46  | 7.46  | 7.46  | 7.47  | 7.49  | 1.1%      |
| Ethanol (E85) 11/              | 14.35 | 17.50 | 17.01 | 16.96 | 17.42 | 17.47 | 17.54 | 17.49 | 17.58 | 17.63 | 17.65 | 17.66 | 17.68 | 17.69 | 17.71 | 17.72 | 17.74 | 17.75 | 17.76 | 17.77 | 17.79 | 17.79 | 1.0%      |
| Methanol (M85) 12/             | 8.99  | 12.26 | 12.12 | 12.20 | 13.65 | 13.67 | 14.01 | 14.01 | 14.28 | 14.30 | 14.31 | 14.32 | 14.34 | 14.35 | 14.36 | 14.37 | 14.38 | 14.39 | 14.40 | 14.41 | 14.41 | 14.42 | 2.2%      |
| Electricity                    | 16.46 | 15.91 | 15.63 | 15.36 | 15.15 | 14.92 | 14.62 | 14.52 | 14.47 | 14.25 | 14.09 | 14.15 | 13.94 | 13.85 | 13.78 | 13.73 | 13.68 | 13.64 | 13.59 | 13.53 | 13.46 | 13.38 | -0.9%     |
| <b>Average End-Use Energy</b>  | 8.08  | 9.01  | 8.84  | 8.77  | 8.77  | 8.77  | 8.76  | 8.77  | 8.80  | 8.81  | 8.80  | 8.81  | 8.78  | 8.78  | 8.78  | 8.79  | 8.81  | 8.81  | 8.81  | 8.81  | 8.80  | 8.81  | 0.4%      |
| Primary Energy                 | 7.59  | 8.66  | 8.48  | 8.42  | 8.42  | 8.43  | 8.43  | 8.43  | 8.47  | 8.49  | 8.48  | 8.49  | 8.46  | 8.47  | 8.46  | 8.47  | 8.49  | 8.49  | 8.49  | 8.49  | 8.48  | 8.49  | 0.5%      |
| Electricity                    | 19.56 | 19.25 | 18.91 | 18.49 | 18.31 | 18.16 | 17.85 | 17.85 | 17.79 | 17.67 | 17.43 | 17.50 | 17.29 | 17.19 | 17.15 | 17.21 | 17.24 | 17.19 | 17.18 | 17.16 | 17.08 | 17.06 | -0.6%     |
| <b>Electric Generators 13/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Fossil Fuel Average            | 1.48  | 1.54  | 1.47  | 1.45  | 1.43  | 1.43  | 1.44  | 1.47  | 1.50  | 1.52  | 1.52  | 1.55  | 1.57  | 1.58  | 1.60  | 1.61  | 1.64  | 1.64  | 1.65  | 1.66  | 1.66  | 1.67  | 0.6%      |
| Petroleum Products             | 2.24  | 3.34  | 3.15  | 3.17  | 3.21  | 3.24  | 3.23  | 3.21  | 3.21  | 3.22  | 3.25  | 3.28  | 3.31  | 3.33  | 3.36  | 3.37  | 3.40  | 3.42  | 3.45  | 3.50  | 3.52  | 3.54  | 2.1%      |
| Distillate Fuel                | 3.19  | 5.00  | 4.88  | 4.89  | 4.93  | 4.96  | 4.98  | 5.03  | 5.05  | 5.08  | 5.16  | 5.12  | 5.12  | 5.10  | 5.09  | 5.08  | 5.10  | 5.09  | 5.10  | 5.15  | 5.18  | 5.23  | 2.3%      |
| Residual Fuel                  | 2.17  | 3.21  | 3.04  | 3.06  | 3.09  | 3.12  | 3.11  | 3.10  | 3.09  | 3.10  | 3.11  | 3.13  | 3.13  | 3.15  | 3.16  | 3.17  | 3.19  | 3.21  | 3.24  | 3.26  | 3.29  | 3.30  | 1.9%      |
| Natural Gas                    | 2.34  | 2.59  | 2.59  | 2.62  | 2.65  | 2.72  | 2.79  | 2.88  | 2.95  | 3.01  | 3.05  | 3.08  | 3.11  | 3.14  | 3.16  | 3.18  | 3.21  | 3.23  | 3.25  | 3.26  | 3.29  | 3.33  | 1.6%      |
| Steam Coal                     | 1.25  | 1.24  | 1.19  | 1.16  | 1.14  | 1.12  | 1.11  | 1.10  | 1.10  | 1.09  | 1.06  | 1.07  | 1.06  | 1.05  | 1.04  | 1.04  | 1.03  | 1.02  | 1.01  | 1.00  | 0.99  | 0.98  | -1.1%     |

**Table 20. Energy Prices by Sector and Source (2 of 2)**  
**(1998 Dollars per Million Btu, Unless Otherwise Noted)**  
**United States Averages**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Average Price to All Users 14/  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Petroleum Products 2/   | 6.64   | 8.32   | 8.10   | 8.11   | 8.14   | 8.19   | 8.22   | 8.21   | 8.26   | 8.29   | 8.33   | 8.32   | 8.32   | 8.34   | 8.34   | 8.34   | 8.35   | 8.35   | 8.35   | 8.35   | 8.35   | 8.35   | 1.0%      |
| Distillate Fuel   | 6.60   | 8.16   | 8.00   | 7.99   | 8.03   | 8.04   | 8.06   | 8.09   | 8.11   | 8.14   | 8.21   | 8.19   | 8.17   | 8.19   | 8.19   | 8.20   | 8.22   | 8.21   | 8.21   | 8.21   | 8.21   | 8.22   | 1.0%      |
| Jet Fuel  | 4.06   | 5.35   | 5.19   | 5.23   | 5.27   | 5.32   | 5.39   | 5.46   | 5.55   | 5.64   | 5.74   | 5.74   | 5.74   | 5.76   | 5.77   | 5.81   | 5.89   | 5.90   | 5.90   | 5.91   | 5.91   | 5.91   | 1.7%      |
| Liquefied Petroleum Gas   | 7.76   | 9.03   | 8.87   | 8.86   | 8.84   | 8.91   | 8.86   | 8.88   | 8.88   | 8.92   | 8.95   | 8.93   | 8.92   | 9.02   | 8.99   | 8.95   | 9.02   | 9.03   | 9.06   | 9.11   | 9.16   | 9.22   | 0.8%      |
| Motor Gasoline 8/   | 8.54   | 10.51  | 10.20  | 10.16  | 10.21  | 10.26  | 10.33  | 10.29  | 10.34  | 10.37  | 10.36  | 10.35  | 10.36  | 10.36  | 10.35  | 10.35  | 10.35  | 10.34  | 10.33  | 10.32  | 10.31  | 10.30  | 0.9%      |
| Residual Fuel   | 2.24   | 3.27   | 3.10   | 3.11   | 3.13   | 3.16   | 3.16   | 3.17   | 3.18   | 3.19   | 3.21   | 3.23   | 3.24   | 3.26   | 3.27   | 3.29   | 3.31   | 3.33   | 3.34   | 3.36   | 3.38   | 3.40   | 1.9%      |
| Natural Gas   | 3.92   | 4.16   | 4.16   | 4.17   | 4.17   | 4.21   | 4.23   | 4.27   | 4.29   | 4.31   | 4.31   | 4.29   | 4.29   | 4.29   | 4.28   | 4.27   | 4.26   | 4.26   | 4.26   | 4.26   | 4.28   | 4.31   | 0.4%      |
| Coal  | 1.29   | 1.25   | 1.20   | 1.18   | 1.15   | 1.14   | 1.13   | 1.12   | 1.11   | 1.11   | 1.08   | 1.09   | 1.08   | 1.07   | 1.06   | 1.05   | 1.04   | 1.04   | 1.02   | 1.01   | 1.00   | 0.99   | -1.2%     |
| Ethanol (E85) 11/   | 14.35  | 17.50  | 17.01  | 16.96  | 17.42  | 17.47  | 17.54  | 17.49  | 17.58  | 17.63  | 17.65  | 17.66  | 17.68  | 17.69  | 17.71  | 17.72  | 17.74  | 17.75  | 17.76  | 17.77  | 17.79  | 17.79  | 1.0%      |
| Methanol (M85) 12/  | 8.99   | 12.26  | 12.12  | 12.20  | 13.65  | 13.67  | 14.01  | 14.01  | 14.28  | 14.30  | 14.31  | 14.32  | 14.34  | 14.35  | 14.36  | 14.37  | 14.38  | 14.39  | 14.40  | 14.41  | 14.41  | 14.42  | 2.2%      |
| Electricity   | 19.56  | 19.25  | 18.91  | 18.49  | 18.31  | 18.16  | 17.85  | 17.85  | 17.79  | 17.67  | 17.43  | 17.50  | 17.29  | 17.19  | 17.15  | 17.21  | 17.24  | 17.19  | 17.18  | 17.16  | 17.08  | 17.06  | -0.6%     |
| Non-Renewable Energy Expenditures<br>by Sector (billion 1998 dollars) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 131.06 | 139.89 | 139.52 | 139.62 | 140.76 | 142.55 | 142.85 | 144.61 | 146.28 | 148.05 | 148.22 | 150.04 | 150.37 | 151.66 | 152.38 | 154.06 | 155.58 | 156.93 | 157.72 | 159.05 | 160.12 | 161.86 | 1.0%      |
| Commercial  | 96.86  | 101.21 | 100.89 | 100.15 | 100.53 | 101.02 | 101.07 | 102.27 | 103.10 | 103.64 | 103.78 | 105.14 | 105.37 | 105.99 | 106.79 | 107.82 | 108.63 | 108.90 | 109.27 | 109.52 | 109.44 | 109.62 | 0.6%      |
| Industrial  | 101.24 | 113.34 | 112.00 | 112.64 | 114.83 | 116.87 | 118.54 | 120.66 | 122.67 | 124.12 | 124.65 | 126.14 | 126.20 | 127.97 | 129.72 | 132.02 | 134.52 | 135.43 | 137.08 | 138.76 | 140.55 | 142.83 | 1.6%      |
| Transportation  | 188.13 | 241.05 | 239.56 | 243.85 | 249.41 | 255.95 | 262.48 | 267.19 | 273.37 | 278.79 | 283.70 | 288.11 | 291.71 | 295.62 | 299.66 | 304.53 | 309.47 | 312.87 | 316.24 | 319.78 | 323.06 | 326.66 | 2.5%      |
| Total Non-Renewable Expend.   | 517.29 | 595.49 | 591.97 | 596.26 | 605.53 | 616.38 | 624.94 | 634.74 | 645.43 | 654.60 | 660.35 | 669.44 | 673.65 | 681.24 | 688.55 | 698.43 | 708.19 | 714.13 | 720.31 | 727.10 | 733.17 | 740.97 | 1.6%      |
| Trans. Renewable Expend.  | 0.04   | 0.16   | 0.22   | 0.30   | 0.38   | 0.47   | 0.57   | 0.66   | 0.75   | 0.84   | 0.93   | 1.01   | 1.08   | 1.14   | 1.20   | 1.26   | 1.31   | 1.34   | 1.37   | 1.39   | 1.41   | 1.41   | 17.5%     |
| Total Expenditures  | 517.33 | 595.64 | 592.19 | 596.56 | 605.91 | 616.86 | 625.50 | 635.40 | 646.19 | 655.44 | 661.28 | 670.44 | 674.73 | 682.39 | 689.75 | 699.69 | 709.50 | 715.47 | 721.68 | 728.50 | 734.58 | 742.38 | 1.7%      |

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes uses for lease and plant fuel.

6/ Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ Sales weighted-average price for all grades. Includes Federal and State taxes and assumes county and local taxes of 2 cents per gallon.

9/ Includes Federal and State taxes while excluding county and local taxes.

10/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ M85 is 85 percent methanol and 15 percent motor gasoline.

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Expend. = Expenditures.

Trans. = Transportation.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999. Sources: 1998 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), Petroleum Marketing Monthly, DOE/EIA-0380 (98/03-99/04) (Washington, DC, 1998-99). 1998 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1995, DOE/EIA-0376(95) (Washington, DC, August 1998). 1998 industrial gas delivered prices are based on EIA, Consumption Survey 1994. 1998 residential and commercial natural gas delivered prices: EIA Natural Gas Monthly, DOE/EIA-0130(99/06) (Washington, DC, June 1999). 1998 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(99/1Q) (Washington, DC, August 1999), and EIA, AEO 2000 National Energy Modeling System run AEO2K.D100199A. 1998 electricity prices for commercial, industrial, and transportation: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 21. Residential Sector Supplement Table (1 of 2)**

1998-

|   | 1998          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 2020        |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| Equipment Stock (million units)             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| <b>Main Space Heaters</b>                   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Electric Heat Pumps                         | 9.58          | 10.05         | 10.26         | 10.47         | 10.67         | 10.88         | 11.02         | 11.15         | 11.28         | 11.41         | 11.53         | 11.65         | 11.77         | 11.89         | 12.03         | 12.18         | 12.32         | 12.45         | 12.59         | 12.72         | 12.85         | 12.98         | 1.4%        |
| Electric Other                              | 20.03         | 20.25         | 20.37         | 20.50         | 20.63         | 20.77         | 20.88         | 20.99         | 21.11         | 21.24         | 21.37         | 21.50         | 21.62         | 21.75         | 21.89         | 22.03         | 22.17         | 22.30         | 22.43         | 22.55         | 22.68         | 22.81         | 0.6%        |
| Natural Gas Heat Pumps                      | 0.02          | 0.06          | 0.08          | 0.10          | 0.12          | 0.14          | 0.17          | 0.19          | 0.21          | 0.24          | 0.26          | 0.28          | 0.31          | 0.33          | 0.35          | 0.37          | 0.42          | 0.46          | 0.51          | 0.55          | 0.60          | 0.64          | 16.7%       |
| Natural Gas Other                           | 54.34         | 56.02         | 56.83         | 57.63         | 58.45         | 59.27         | 60.20         | 61.12         | 62.04         | 62.94         | 63.79         | 64.63         | 65.42         | 66.21         | 67.00         | 67.82         | 68.60         | 69.34         | 70.07         | 70.81         | 71.54         | 72.26         | 1.3%        |
| Distillate                                  | 9.42          | 9.35          | 9.30          | 9.25          | 9.21          | 9.16          | 9.11          | 9.06          | 9.01          | 8.95          | 8.90          | 8.84          | 8.79          | 8.73          | 8.68          | 8.62          | 8.57          | 8.51          | 8.45          | 8.39          | 8.33          | 8.27          | -0.6%       |
| Liquid Petroleum Gas                        | 4.73          | 4.91          | 4.97          | 5.02          | 5.07          | 5.12          | 5.15          | 5.17          | 5.19          | 5.21          | 5.22          | 5.23          | 5.23          | 5.23          | 5.23          | 5.23          | 5.22          | 5.21          | 5.20          | 5.19          | 5.18          | 5.17          | 0.4%        |
| Kerosene                                    | 0.97          | 0.94          | 0.93          | 0.92          | 0.91          | 0.90          | 0.89          | 0.88          | 0.87          | 0.86          | 0.86          | 0.85          | 0.84          | 0.83          | 0.82          | 0.82          | 0.81          | 0.80          | 0.79          | 0.79          | 0.78          | 0.77          | -1.0%       |
| Wood Stoves                                 | 2.18          | 2.17          | 2.17          | 2.16          | 2.16          | 2.16          | 2.15          | 2.14          | 2.13          | 2.13          | 2.12          | 2.12          | 2.11          | 2.11          | 2.11          | 2.11          | 2.11          | 2.11          | 2.11          | 2.11          | 2.11          | 2.12          | -0.1%       |
| Geothermal Heat Pumps                       | 0.38          | 0.43          | 0.45          | 0.48          | 0.51          | 0.54          | 0.60          | 0.67          | 0.73          | 0.80          | 0.86          | 0.92          | 0.98          | 1.04          | 1.10          | 1.16          | 1.22          | 1.28          | 1.33          | 1.39          | 1.44          | 1.50          | 6.5%        |
| <b>Total</b>                                | <b>101.64</b> | <b>104.19</b> | <b>105.37</b> | <b>106.54</b> | <b>107.73</b> | <b>108.94</b> | <b>110.17</b> | <b>111.38</b> | <b>112.59</b> | <b>113.78</b> | <b>114.91</b> | <b>116.03</b> | <b>117.07</b> | <b>118.13</b> | <b>119.22</b> | <b>120.34</b> | <b>121.45</b> | <b>122.47</b> | <b>123.48</b> | <b>124.50</b> | <b>125.52</b> | <b>126.51</b> | <b>1.0%</b> |
| <b>Space Cooling (million units)</b>        |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Electric Heat Pumps                         | 9.58          | 10.05         | 10.26         | 10.47         | 10.67         | 10.88         | 11.02         | 11.15         | 11.28         | 11.41         | 11.53         | 11.65         | 11.77         | 11.89         | 12.03         | 12.18         | 12.32         | 12.45         | 12.59         | 12.72         | 12.85         | 12.98         | 1.4%        |
| Natural Gas Heat Pumps                      | 0.02          | 0.06          | 0.08          | 0.10          | 0.12          | 0.14          | 0.17          | 0.19          | 0.21          | 0.24          | 0.26          | 0.28          | 0.31          | 0.33          | 0.35          | 0.37          | 0.42          | 0.46          | 0.51          | 0.55          | 0.60          | 0.64          | 16.7%       |
| Geothermal Heat Pumps                       | 0.38          | 0.43          | 0.45          | 0.48          | 0.51          | 0.54          | 0.60          | 0.67          | 0.73          | 0.80          | 0.86          | 0.92          | 0.98          | 1.04          | 1.10          | 1.16          | 1.22          | 1.28          | 1.33          | 1.39          | 1.44          | 1.50          | 6.5%        |
| Central Air Conditioners                    | 40.10         | 42.14         | 43.08         | 44.02         | 44.97         | 45.92         | 46.89         | 47.85         | 48.80         | 49.73         | 50.62         | 51.50         | 52.33         | 53.17         | 54.01         | 54.87         | 55.70         | 56.48         | 57.25         | 58.02         | 58.79         | 59.53         | 1.8%        |
| Room Air Conditioners                       | 37.07         | 37.11         | 37.13         | 37.15         | 37.18         | 37.22         | 37.26         | 37.31         | 37.36         | 37.41         | 37.46         | 37.52         | 37.57         | 37.62         | 37.67         | 37.74         | 37.80         | 37.85         | 37.91         | 37.96         | 38.01         | 38.06         | 0.1%        |
| <b>Total</b>                                | <b>87.14</b>  | <b>89.78</b>  | <b>91.01</b>  | <b>92.23</b>  | <b>93.45</b>  | <b>94.69</b>  | <b>95.94</b>  | <b>97.16</b>  | <b>98.38</b>  | <b>99.58</b>  | <b>100.73</b> | <b>101.87</b> | <b>102.95</b> | <b>104.04</b> | <b>105.17</b> | <b>106.33</b> | <b>107.47</b> | <b>108.53</b> | <b>109.59</b> | <b>110.64</b> | <b>111.69</b> | <b>112.71</b> | <b>1.2%</b> |
| <b>Water Heaters (million units)</b>        |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Electric                                    | 40.06         | 40.88         | 41.28         | 41.69         | 42.10         | 42.53         | 42.90         | 43.27         | 43.66         | 44.04         | 44.42         | 44.79         | 45.15         | 45.53         | 45.92         | 46.32         | 46.71         | 47.06         | 47.41         | 47.76         | 48.12         | 48.48         | 0.9%        |
| Natural Gas                                 | 53.45         | 54.99         | 55.72         | 56.45         | 57.18         | 57.93         | 58.77         | 59.59         | 60.42         | 61.22         | 61.98         | 62.74         | 63.44         | 64.15         | 64.87         | 65.61         | 66.36         | 67.05         | 67.74         | 68.42         | 69.11         | 69.78         | 1.2%        |
| Distillate                                  | 5.12          | 5.10          | 5.08          | 5.06          | 5.04          | 5.02          | 4.99          | 4.97          | 4.94          | 4.91          | 4.88          | 4.85          | 4.82          | 4.79          | 4.76          | 4.72          | 4.69          | 4.66          | 4.63          | 4.60          | 4.57          | 4.53          | -0.6%       |
| Liquid Petroleum Gas                        | 3.35          | 3.55          | 3.62          | 3.68          | 3.73          | 3.79          | 3.82          | 3.86          | 3.89          | 3.91          | 3.93          | 3.95          | 3.96          | 3.96          | 3.97          | 3.98          | 3.98          | 3.99          | 3.99          | 3.99          | 3.99          | 3.99          | 0.8%        |
| Solar Thermal                               | 0.36          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.34          | 0.34          | 0.34          | 0.34          | 0.34          | 0.34          | 0.34          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.32          | -0.4%       |
| <b>Total</b>                                | <b>102.34</b> | <b>104.88</b> | <b>106.05</b> | <b>107.22</b> | <b>108.40</b> | <b>109.60</b> | <b>110.83</b> | <b>112.04</b> | <b>113.25</b> | <b>114.43</b> | <b>115.55</b> | <b>116.67</b> | <b>117.71</b> | <b>118.76</b> | <b>119.85</b> | <b>120.97</b> | <b>122.07</b> | <b>123.09</b> | <b>124.10</b> | <b>125.11</b> | <b>126.12</b> | <b>127.11</b> | <b>1.0%</b> |
| <b>Cooking Equipment (million units) 1/</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Electric                                    | 63.11         | 64.63         | 65.36         | 66.08         | 66.81         | 67.54         | 68.27         | 68.99         | 69.72         | 70.45         | 71.14         | 71.82         | 72.45         | 73.07         | 73.72         | 74.39         | 75.04         | 75.65         | 76.28         | 76.92         | 77.60         | 78.27         | 1.0%        |
| Natural Gas                                 | 34.21         | 35.08         | 35.49         | 35.90         | 36.32         | 36.76         | 37.25         | 37.73         | 38.19         | 38.65         | 39.09         | 39.53         | 39.96         | 40.40         | 40.85         | 41.33         | 41.80         | 42.22         | 42.62         | 42.99         | 43.35         | 43.68         | 1.1%        |
| Liquid Petroleum Gas                        | 4.28          | 4.43          | 4.48          | 4.52          | 4.55          | 4.58          | 4.60          | 4.62          | 4.62          | 4.63          | 4.63          | 4.62          | 4.61          | 4.60          | 4.59          | 4.58          | 4.56          | 4.55          | 4.53          | 4.52          | 4.51          | 4.50          | 0.2%        |
| <b>Total</b>                                | <b>101.60</b> | <b>104.14</b> | <b>105.32</b> | <b>106.49</b> | <b>107.68</b> | <b>108.89</b> | <b>110.12</b> | <b>111.33</b> | <b>112.54</b> | <b>113.73</b> | <b>114.85</b> | <b>115.97</b> | <b>117.02</b> | <b>118.07</b> | <b>119.16</b> | <b>120.29</b> | <b>121.40</b> | <b>122.41</b> | <b>123.43</b> | <b>124.44</b> | <b>125.46</b> | <b>126.45</b> | <b>1.0%</b> |
| <b>Clothes Dryers (million units)</b>       |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Electric                                    | 56.99         | 59.46         | 60.60         | 61.71         | 62.82         | 63.94         | 65.05         | 66.15         | 67.23         | 68.28         | 69.28         | 70.26         | 71.18         | 72.10         | 73.04         | 73.99         | 74.93         | 75.80         | 76.67         | 77.53         | 78.39         | 79.23         | 1.5%        |
| Natural Gas                                 | 15.84         | 16.65         | 17.04         | 17.43         | 17.83         | 18.24         | 18.65         | 19.06         | 19.47         | 19.87         | 20.25         | 20.64         | 21.01         | 21.38         | 21.76         | 22.15         | 22.53         | 22.89         | 23.25         | 23.61         | 23.97         | 24.32         | 2.0%        |
| <b>Total</b>                                | <b>72.84</b>  | <b>76.11</b>  | <b>77.64</b>  | <b>79.14</b>  | <b>80.65</b>  | <b>82.17</b>  | <b>83.70</b>  | <b>85.20</b>  | <b>86.70</b>  | <b>88.14</b>  | <b>89.53</b>  | <b>90.90</b>  | <b>92.19</b>  | <b>93.48</b>  | <b>94.80</b>  | <b>96.14</b>  | <b>97.46</b>  | <b>98.69</b>  | <b>99.92</b>  | <b>101.14</b> | <b>102.36</b> | <b>103.55</b> | <b>1.6%</b> |
| <b>Other Appliances (million units)</b>     |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Refrigerators                               | 116.47        | 119.11        | 120.33        | 121.54        | 122.76        | 124.01        | 125.29        | 126.54        | 127.80        | 129.02        | 130.18        | 131.33        | 132.40        | 133.48        | 134.60        | 135.75        | 136.89        | 137.93        | 138.97        | 140.01        | 141.05        | 142.07        | 0.9%        |
| Freezers                                    | 33.69         | 33.69         | 33.64         | 33.59         | 33.56         | 33.52         | 33.51         | 33.51         | 33.52         | 33.51         | 33.48         | 33.47         | 33.46         | 33.48         | 33.53         | 33.62         | 33.73         | 33.82         | 33.93         | 34.05         | 34.20         | 34.36         | 0.1%        |

**Table 21. Residential Sector Supplement Table (2 of 2)**

1998-

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| <b>Stock Average Equipment Efficiency</b>        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| <b>Main Space Heaters</b>                        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Elec. Heat Pumps (HSPF)                          | 6.94   | 7.10   | 7.15   | 7.19   | 7.22   | 7.23   | 7.24   | 7.25   | 7.25   | 7.25   | 7.24   | 7.24   | 7.25   | 7.25   | 7.26   | 7.27   | 7.30   | 7.33   | 7.36   | 7.38   | 7.40   | 7.43   | 0.3%  |
| NG Heat Pumps (HSPF)                             | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | 14.00  | N/A   |
| Geo. Heat Pumps (COP)                            | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.40   | 3.44   | 3.48   | 3.51   | 3.54   | 3.58   | 3.61   | 0.3%  |
| Natural Gas Furnace (AFUE)                       | 0.75   | 0.76   | 0.77   | 0.77   | 0.78   | 0.78   | 0.79   | 0.80   | 0.80   | 0.81   | 0.81   | 0.82   | 0.82   | 0.82   | 0.83   | 0.83   | 0.83   | 0.83   | 0.84   | 0.84   | 0.84   | 0.84   | 0.5%  |
| Distillate Furnace (AFUE)                        | 0.78   | 0.79   | 0.79   | 0.80   | 0.80   | 0.80   | 0.81   | 0.81   | 0.81   | 0.81   | 0.81   | 0.81   | 0.82   | 0.82   | 0.82   | 0.82   | 0.82   | 0.82   | 0.82   | 0.82   | 0.82   | 0.82   | 0.2%  |
| <b>Space Cooling</b>                             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Elec. Heat Pumps (SEER)                          | 10.25  | 10.56  | 10.68  | 10.78  | 10.85  | 10.90  | 10.96  | 11.00  | 11.02  | 11.04  | 11.06  | 11.08  | 11.09  | 11.11  | 11.12  | 11.13  | 11.19  | 11.24  | 11.29  | 11.33  | 11.37  | 11.41  | 0.5%  |
| NG Heat Pumps (SEER)                             | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 15.60  | 0.0%  |
| Geo. Heat Pumps (EER)                            | 13.50  | 13.50  | 13.50  | 13.50  | 13.50  | 13.50  | 14.68  | 15.33  | 15.96  | 16.56  | 17.13  | 17.68  | 18.20  | 18.73  | 19.25  | 19.71  | 19.48  | 19.07  | 18.64  | 18.19  | 17.74  | 17.28  | 1.1%  |
| Cent. Air Conditioners(SEER)                     | 10.10  | 10.34  | 10.45  | 10.54  | 10.61  | 10.66  | 10.75  | 10.81  | 10.86  | 10.91  | 10.95  | 10.98  | 11.02  | 11.05  | 11.08  | 11.10  | 11.16  | 11.21  | 11.25  | 11.30  | 11.33  | 11.37  | 0.5%  |
| Room Air Conditioners (EER)                      | 8.53   | 8.70   | 8.81   | 8.92   | 9.03   | 9.12   | 9.21   | 9.29   | 9.36   | 9.42   | 9.47   | 9.52   | 9.56   | 9.61   | 9.65   | 9.69   | 9.73   | 9.75   | 9.77   | 9.79   | 9.80   | 9.80   | 0.6%  |
| <b>Water Heaters</b>                             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Electric (EF)                                    | 0.87   | 0.87   | 0.87   | 0.87   | 0.87   | 0.87   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.88   | 0.89   | 0.1%  |
| Natural Gas (EF)                                 | 0.54   | 0.54   | 0.55   | 0.55   | 0.55   | 0.55   | 0.55   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.57   | 0.57   | 0.57   | 0.57   | 0.57   | 0.57   | 0.57   | 0.3%  |
| Distillate (EF)                                  | 0.53   | 0.53   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.0%  |
| Liquid Petroleum Gas (EF)                        | 0.54   | 0.55   | 0.55   | 0.55   | 0.56   | 0.56   | 0.56   | 0.56   | 0.57   | 0.57   | 0.57   | 0.57   | 0.58   | 0.58   | 0.58   | 0.58   | 0.58   | 0.58   | 0.59   | 0.59   | 0.59   | 0.59   | 0.4%  |
| <b>Other Appliances (kilowatthours per year)</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Refrigerators                                    | 937.97 | 880.99 | 857.58 | 822.70 | 790.08 | 759.92 | 732.00 | 706.30 | 682.28 | 659.74 | 638.41 | 618.99 | 601.56 | 585.85 | 571.92 | 559.58 | 548.87 | 539.63 | 531.76 | 525.01 | 519.38 | 514.40 | -2.7% |
| Freezers   | 678.12 | 631.33 | 609.99 | 586.93 | 565.38 | 545.42 | 528.13 | 514.12 | 502.54 | 492.48 | 483.89 | 476.26 | 469.80 | 464.27 | 459.24 | 454.95 | 451.38 | 448.47 | 446.15 | 444.33 | 442.88 | 441.81 | -1.9% |
| <b>Building Shell Efficiency Index</b>           |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| <b>Space Heating</b>                             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Pre-1998 Homes                                   | 0.95   | 0.94   | 0.93   | 0.93   | 0.93   | 0.92   | 0.92   | 0.91   | 0.91   | 0.91   | 0.90   | 0.90   | 0.90   | 0.89   | 0.89   | 0.88   | 0.88   | 0.88   | 0.88   | 0.87   | 0.87   | 0.87   | -0.4% |
| New Construction                                 | 0.86   | 0.86   | 0.86   | 0.86   | 0.86   | 0.85   | 0.85   | 0.85   | 0.85   | 0.85   | 0.84   | 0.84   | 0.84   | 0.83   | 0.83   | 0.83   | 0.82   | 0.82   | 0.81   | 0.81   | 0.80   | 0.80   | -0.3% |
| All Homes  | 0.95   | 0.93   | 0.93   | 0.92   | 0.92   | 0.91   | 0.91   | 0.91   | 0.90   | 0.90   | 0.89   | 0.89   | 0.89   | 0.88   | 0.88   | 0.88   | 0.87   | 0.87   | 0.87   | 0.86   | 0.86   | 0.86   | -0.4% |
| <b>Space Cooling</b>                             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Pre-1998 Homes                                   | 0.95   | 0.94   | 0.94   | 0.94   | 0.93   | 0.93   | 0.93   | 0.92   | 0.92   | 0.92   | 0.91   | 0.91   | 0.91   | 0.90   | 0.90   | 0.90   | 0.89   | 0.89   | 0.89   | 0.88   | 0.88   | 0.88   | -0.3% |
| New Construction                                 | 0.87   | 0.87   | 0.86   | 0.86   | 0.86   | 0.86   | 0.86   | 0.86   | 0.85   | 0.85   | 0.85   | 0.85   | 0.84   | 0.84   | 0.83   | 0.83   | 0.82   | 0.82   | 0.81   | 0.81   | 0.80   | 0.80   | -0.4% |
| All Homes  | 0.95   | 0.94   | 0.93   | 0.93   | 0.92   | 0.92   | 0.92   | 0.91   | 0.91   | 0.91   | 0.90   | 0.90   | 0.89   | 0.89   | 0.89   | 0.88   | 0.88   | 0.88   | 0.87   | 0.87   | 0.87   | 0.87   | -0.4% |

1/ Does not include microwave ovens or outdoor grills.

HSPF = Heating Seasonal Performance Factor: The total heating output of a heat pump in Btu during its normal annual usage period for heating divided by total electric input in watt-hours during the same period.

COP = Coefficient of Performance: Energy efficiency rating measure determined, under specific testing conditions, by dividing the energy output by the energy input.

AFUE = Annual Fuel Utilization Efficiency: Efficiency rating based on average usage, including on and off cycling, as set out in the standardized Department of Energy test procedures.

SEER = Seasonal Energy Efficiency Ratio: The total cooling of a central unitary air conditioner or a unitary heat pump in Btu during its normal annual usage period for cooling divided by the total electric energy input in watt-hours during the same period.

EER = Energy Efficiency Ratio: A ratio calculated by dividing the cooling capacity in Btu per hour by the power input in watts at any given set of rating conditions, expressed in Btu per hour per watt.

EF = Efficiency Factor: Efficiency (measured in Btu out / Btu in) of water heaters under certain test conditions specified by the Department of Energy.

kWh/y = Kilowatt hours per year to run the appliance under certain test conditions as specified by the Department of Energy.

Btu = British thermal unit.

N/A = Not applicable.

Elec. = Electric.

Geo. = Geothermal.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports.

Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 22. Commercial Sector Supplement Table (1 of 2)**

|  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Commercial Building Delivered                        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Energy Consumption (quadrillion Btu) 1/              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Assembly   | 0.50  | 0.52  | 0.53  | 0.53  | 0.53  | 0.53  | 0.54  | 0.54  | 0.54  | 0.54  | 0.54  | 0.55  | 0.55  | 0.55  | 0.55  | 0.55  | 0.56  | 0.56  | 0.56  | 0.56  | 0.56  | 0.56  | 0.5%      |
| Education  | 0.67  | 0.70  | 0.71  | 0.71  | 0.72  | 0.72  | 0.73  | 0.73  | 0.74  | 0.75  | 0.75  | 0.76  | 0.77  | 0.77  | 0.78  | 0.78  | 0.79  | 0.79  | 0.79  | 0.79  | 0.79  | 0.79  | 0.8%      |
| Food Sales   | 0.14  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.17  | 0.8%      |
| Food Service   | 0.37  | 0.38  | 0.38  | 0.39  | 0.39  | 0.40  | 0.40  | 0.41  | 0.41  | 0.41  | 0.42  | 0.42  | 0.43  | 0.43  | 0.44  | 0.44  | 0.44  | 0.44  | 0.45  | 0.45  | 0.45  | 0.45  | 0.8%      |
| Health Care  | 0.51  | 0.54  | 0.55  | 0.55  | 0.56  | 0.57  | 0.58  | 0.59  | 0.60  | 0.61  | 0.61  | 0.62  | 0.63  | 0.64  | 0.65  | 0.65  | 0.66  | 0.67  | 0.67  | 0.68  | 0.68  | 0.69  | 1.3%      |
| Lodging  | 0.52  | 0.54  | 0.54  | 0.55  | 0.56  | 0.56  | 0.57  | 0.58  | 0.58  | 0.59  | 0.60  | 0.61  | 0.62  | 0.63  | 0.63  | 0.64  | 0.64  | 0.65  | 0.65  | 0.65  | 0.66  | 0.66  | 1.1%      |
| Office - Large                                       | 0.66  | 0.68  | 0.69  | 0.69  | 0.70  | 0.71  | 0.72  | 0.72  | 0.73  | 0.74  | 0.75  | 0.76  | 0.77  | 0.78  | 0.78  | 0.79  | 0.79  | 0.80  | 0.80  | 0.80  | 0.80  | 0.81  | 0.9%      |
| Office - Small                                       | 0.50  | 0.52  | 0.53  | 0.54  | 0.55  | 0.55  | 0.56  | 0.56  | 0.57  | 0.58  | 0.58  | 0.59  | 0.60  | 0.60  | 0.61  | 0.61  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 0.62  | 1.0%      |
| Mercantile/Service                                   | 1.04  | 1.11  | 1.12  | 1.13  | 1.13  | 1.14  | 1.15  | 1.16  | 1.17  | 1.18  | 1.19  | 1.20  | 1.21  | 1.22  | 1.23  | 1.24  | 1.24  | 1.24  | 1.24  | 1.24  | 1.24  | 1.24  | 0.8%      |
| Warehouse  | 0.35  | 0.38  | 0.38  | 0.39  | 0.40  | 0.40  | 0.41  | 0.42  | 0.42  | 0.43  | 0.44  | 0.44  | 0.45  | 0.45  | 0.46  | 0.46  | 0.46  | 0.46  | 0.47  | 0.47  | 0.47  | 0.47  | 1.3%      |
| Other  | 0.45  | 0.48  | 0.49  | 0.50  | 0.51  | 0.52  | 0.53  | 0.54  | 0.55  | 0.56  | 0.57  | 0.58  | 0.59  | 0.60  | 0.61  | 0.62  | 0.63  | 0.64  | 0.64  | 0.65  | 0.65  | 0.66  | 1.8%      |
| Total  | 5.71  | 5.98  | 6.07  | 6.15  | 6.20  | 6.27  | 6.34  | 6.41  | 6.47  | 6.55  | 6.63  | 6.70  | 6.78  | 6.85  | 6.91  | 6.96  | 7.00  | 7.03  | 7.06  | 7.08  | 7.10  | 7.11  | 1.0%      |
| Commercial Building Floorspace (billion square feet) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Assembly   | 6.91  | 7.06  | 7.11  | 7.15  | 7.19  | 7.24  | 7.29  | 7.33  | 7.37  | 7.41  | 7.45  | 7.49  | 7.53  | 7.56  | 7.58  | 7.60  | 7.62  | 7.63  | 7.64  | 7.64  | 7.64  | 7.64  | 0.5%      |
| Education  | 8.08  | 8.36  | 8.49  | 8.62  | 8.74  | 8.86  | 8.99  | 9.11  | 9.24  | 9.36  | 9.49  | 9.62  | 9.74  | 9.85  | 9.94  | 10.02 | 10.08 | 10.12 | 10.16 | 10.19 | 10.22 | 10.24 | 1.1%      |
| Food Sales   | 0.68  | 0.70  | 0.70  | 0.71  | 0.72  | 0.73  | 0.74  | 0.75  | 0.75  | 0.76  | 0.77  | 0.78  | 0.79  | 0.79  | 0.80  | 0.80  | 0.81  | 0.81  | 0.81  | 0.81  | 0.82  | 0.82  | 0.9%      |
| Food Service   | 1.41  | 1.45  | 1.46  | 1.47  | 1.48  | 1.50  | 1.51  | 1.53  | 1.54  | 1.56  | 1.57  | 1.58  | 1.60  | 1.61  | 1.62  | 1.62  | 1.63  | 1.63  | 1.63  | 1.63  | 1.63  | 1.63  | 0.6%      |
| Health Care  | 1.73  | 1.80  | 1.82  | 1.85  | 1.88  | 1.91  | 1.94  | 1.96  | 1.98  | 2.00  | 2.02  | 2.04  | 2.07  | 2.08  | 2.10  | 2.11  | 2.13  | 2.14  | 2.15  | 2.16  | 2.17  | 2.18  | 1.1%      |
| Lodging  | 3.81  | 4.01  | 4.09  | 4.15  | 4.20  | 4.26  | 4.33  | 4.39  | 4.44  | 4.50  | 4.56  | 4.62  | 4.68  | 4.73  | 4.77  | 4.81  | 4.84  | 4.87  | 4.89  | 4.90  | 4.91  | 4.92  | 1.2%      |
| Office - Large                                       | 5.82  | 5.95  | 6.00  | 6.04  | 6.08  | 6.11  | 6.15  | 6.20  | 6.25  | 6.31  | 6.37  | 6.42  | 6.47  | 6.51  | 6.54  | 6.56  | 6.57  | 6.58  | 6.57  | 6.56  | 6.55  | 6.53  | 0.5%      |
| Office - Small                                       | 5.50  | 5.63  | 5.69  | 5.73  | 5.77  | 5.81  | 5.85  | 5.90  | 5.96  | 6.01  | 6.07  | 6.13  | 6.18  | 6.22  | 6.25  | 6.28  | 6.29  | 6.30  | 6.30  | 6.29  | 6.28  | 6.27  | 0.6%      |
| Mercantile/Service                                   | 13.30 | 13.71 | 13.86 | 13.98 | 14.09 | 14.23 | 14.38 | 14.54 | 14.69 | 14.85 | 15.00 | 15.14 | 15.27 | 15.39 | 15.50 | 15.59 | 15.66 | 15.71 | 15.75 | 15.77 | 15.78 | 15.78 | 0.8%      |
| Warehouse  | 8.96  | 9.34  | 9.49  | 9.62  | 9.75  | 9.87  | 10.01 | 10.15 | 10.28 | 10.41 | 10.52 | 10.63 | 10.72 | 10.79 | 10.85 | 10.89 | 10.92 | 10.93 | 10.93 | 10.91 | 10.88 | 10.84 | 0.9%      |
| Other  | 5.04  | 5.34  | 5.48  | 5.60  | 5.72  | 5.82  | 5.93  | 6.04  | 6.14  | 6.24  | 6.33  | 6.42  | 6.50  | 6.58  | 6.65  | 6.72  | 6.78  | 6.84  | 6.89  | 6.93  | 6.96  | 6.98  | 1.5%      |
| Total  | 61.24 | 63.34 | 64.20 | 64.93 | 65.62 | 66.34 | 67.11 | 67.89 | 68.66 | 69.41 | 70.16 | 70.87 | 71.53 | 72.11 | 72.60 | 73.00 | 73.32 | 73.56 | 73.72 | 73.81 | 73.84 | 73.81 | 0.9%      |
| Stock Average Equipment Efficiency 2/                |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Space Heating  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Electricity  | 1.08  | 1.09  | 1.10  | 1.10  | 1.11  | 1.11  | 1.12  | 1.12  | 1.12  | 1.12  | 1.13  | 1.13  | 1.13  | 1.13  | 1.13  | 1.13  | 1.13  | 1.13  | 1.13  | 1.13  | 1.13  | 1.13  | 0.2%      |
| Natural Gas  | 0.74  | 0.75  | 0.75  | 0.76  | 0.76  | 0.76  | 0.77  | 0.77  | 0.77  | 0.78  | 0.78  | 0.78  | 0.78  | 0.79  | 0.79  | 0.79  | 0.79  | 0.79  | 0.79  | 0.79  | 0.80  | 0.80  | 0.3%      |
| Distillate   | 0.75  | 0.75  | 0.75  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.2%      |
| Space Cooling  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Electricity  | 2.49  | 2.57  | 2.61  | 2.65  | 2.68  | 2.72  | 2.76  | 2.80  | 2.83  | 2.87  | 2.90  | 2.93  | 2.96  | 2.99  | 3.01  | 3.03  | 3.06  | 3.08  | 3.10  | 3.13  | 3.15  | 3.16  | 1.1%      |
| Natural Gas  | 0.88  | 0.92  | 0.94  | 0.95  | 0.96  | 0.97  | 0.99  | 1.01  | 1.03  | 1.04  | 1.06  | 1.07  | 1.08  | 1.09  | 1.10  | 1.11  | 1.12  | 1.13  | 1.14  | 1.14  | 1.15  | 1.16  | 1.2%      |

**Table 22. Commercial Sector Supplement Table (2 of 2)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |      |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------|
| Water Heating   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Electricity   | 0.94  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97      | 0.2% |
| Natural Gas   | 0.73  | 0.74  | 0.75  | 0.76  | 0.76  | 0.77  | 0.77  | 0.78  | 0.78  | 0.78  | 0.79  | 0.79  | 0.79  | 0.79  | 0.79  | 0.80  | 0.80  | 0.80  | 0.80  | 0.80  | 0.80  | 0.80  | 0.80      | 0.5% |
| Distillate  | 0.74  | 0.75  | 0.75  | 0.75  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77  | 0.77      | 0.2% |
| Ventilation (cfm per Btu) 3/                          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Electricity   | 0.39  | 0.40  | 0.40  | 0.41  | 0.41  | 0.41  | 0.41  | 0.41  | 0.42  | 0.42  | 0.42  | 0.43  | 0.43  | 0.43  | 0.43  | 0.44  | 0.44  | 0.44  | 0.45  | 0.45  | 0.45  | 0.45  | 0.45      | 0.7% |
| Cooking   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Electricity   | 0.52  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53  | 0.53      | 0.1% |
| Natural Gas   | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50      | 0.0% |
| Lighting Efficacy 4/<br>(efficacy in lumens per watt) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Electricity   | 49.02 | 50.43 | 51.16 | 51.91 | 52.68 | 53.40 | 53.97 | 54.54 | 55.06 | 55.50 | 55.88 | 56.28 | 56.59 | 56.85 | 57.08 | 57.30 | 57.68 | 58.05 | 58.38 | 58.75 | 59.13 | 59.53 | 0.9%      |      |
| Refrigeration   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| Electricity   | 1.31  | 1.32  | 1.32  | 1.32  | 1.33  | 1.33  | 1.33  | 1.34  | 1.34  | 1.34  | 1.35  | 1.35  | 1.35  | 1.35  | 1.35  | 1.36  | 1.36  | 1.36  | 1.36  | 1.36  | 1.36  | 1.36  | 1.36      | 0.2% |

1/ Excludes commercial sector energy consumption (from uses such as street lights) that is not attributable to buildings.

2/ Unless noted otherwise, the efficiency measures are in the terms of Btu of energy output divided by Btu of energy input.

3/ The efficiency measure for ventilation is in terms of cubic feet per minute (cfm) of ventilation air delivered divided by Btu of energy input.

4/ A measurement of the ratio of light produced by a light source to the electrical power used to produce that quality of light, expressed in lumens per watt.

Quad. = Quadrillion.

Btu = British thermal unit.

Avg. = Average.

Equip. = Equipment.

Cfm = Cubic feet per minute.

PC = Personal computer.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 23. Industrial Sector Macroeconomic Indicators (1 of 2)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| GDP (billion 1992 dollars)                      | 7552  | 7991  | 8191  | 8377  | 8596  | 8824  | 9056  | 9251  | 9449  | 9651  | 9840  | 10054 | 10218 | 10416 | 10648 | 10906 | 11147 | 11331 | 11533 | 11741 | 11959 | 12179 | 2.2%      |
| Non-Agricultural Emp. (million)                 | 126.2 | 129.7 | 130.2 | 131.2 | 132.6 | 133.9 | 135.3 | 136.5 | 137.5 | 138.5 | 139.2 | 140.1 | 140.8 | 141.5 | 142.3 | 143.4 | 144.6 | 145.4 | 145.9 | 146.5 | 147.1 | 147.8 | 0.7%      |
| Value of Gross Output<br>(billion 1987 dollars) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Nonmanufacturing Sector                         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Agricultural                                    | 258.4 | 264.4 | 267.1 | 270.8 | 273.8 | 277.3 | 280.6 | 283.3 | 286.1 | 289.0 | 291.2 | 294.6 | 297.4 | 300.5 | 304.5 | 308.7 | 312.6 | 315.2 | 318.7 | 322.4 | 326.0 | 329.7 | 1.1%      |
| Mining  | 137.2 | 136.1 | 135.3 | 135.8 | 137.5 | 138.8 | 140.6 | 142.3 | 144.1 | 145.6 | 146.4 | 148.1 | 149.3 | 150.7 | 152.4 | 154.4 | 156.6 | 157.6 | 159.0 | 160.0 | 161.0 | 161.9 | 0.8%      |
| Construction                                    | 439.5 | 456.9 | 461.9 | 473.3 | 483.0 | 496.9 | 510.8 | 520.3 | 528.5 | 534.8 | 539.1 | 546.4 | 550.2 | 558.4 | 568.5 | 583.5 | 597.7 | 603.2 | 609.1 | 617.6 | 629.3 | 638.9 | 1.7%      |
| Manufacturing Sector                            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Food and Kindred Products                       | 409.9 | 421.5 | 425.7 | 429.9 | 433.6 | 437.7 | 442.6 | 446.7 | 450.7 | 454.5 | 457.9 | 462.3 | 466.9 | 471.5 | 476.8 | 482.7 | 488.9 | 494.1 | 499.5 | 504.8 | 510.4 | 516.2 | 1.1%      |
| Tobacco Products                                | 28.1  | 27.6  | 27.3  | 27.2  | 27.1  | 26.9  | 26.7  | 26.3  | 26.0  | 25.7  | 25.3  | 25.0  | 24.6  | 24.3  | 24.2  | 24.0  | 23.8  | 23.4  | 23.2  | 22.9  | 22.6  | 22.3  | -1.0%     |
| Textile Mill Products                           | 58.3  | 58.7  | 58.0  | 57.9  | 58.4  | 58.5  | 58.5  | 58.3  | 58.3  | 58.5  | 58.3  | 58.8  | 58.9  | 59.1  | 60.0  | 60.7  | 60.9  | 60.7  | 61.1  | 61.5  | 61.9  | 62.4  | 0.3%      |
| Apparel and Other Textile<br>Products           | 86.0  | 82.7  | 79.9  | 78.6  | 78.4  | 77.9  | 77.4  | 75.8  | 74.9  | 74.2  | 72.7  | 72.4  | 71.6  | 70.7  | 70.6  | 69.8  | 68.4  | 67.2  | 67.4  | 67.7  | 67.3  | 67.0  | -1.1%     |
| Lumber and Wood Products                        | 79.1  | 82.5  | 83.3  | 84.5  | 86.2  | 87.3  | 88.6  | 89.3  | 89.8  | 90.0  | 90.1  | 90.8  | 90.8  | 91.4  | 91.9  | 93.4  | 94.6  | 94.6  | 94.8  | 95.3  | 96.0  | 96.7  | 0.9%      |
| Furniture and Fixtures                          | 46.5  | 50.2  | 50.2  | 51.0  | 52.2  | 52.9  | 53.5  | 53.2  | 53.5  | 53.9  | 54.0  | 54.7  | 55.0  | 55.5  | 56.7  | 58.1  | 59.4  | 59.9  | 60.6  | 61.2  | 62.0  | 63.1  | 1.4%      |
| Paper and Allied Products                       | 127.6 | 132.1 | 134.5 | 136.7 | 139.1 | 141.2 | 143.4 | 145.1 | 146.6 | 148.1 | 149.3 | 150.9 | 151.8 | 153.2 | 154.8 | 156.8 | 158.8 | 160.1 | 161.3 | 162.5 | 164.0 | 165.6 | 1.2%      |
| Printing and Publishing                         | 143.0 | 143.6 | 144.3 | 145.6 | 147.2 | 148.8 | 150.4 | 151.4 | 152.5 | 153.5 | 154.0 | 155.3 | 155.9 | 156.8 | 158.2 | 160.1 | 162.1 | 163.1 | 164.0 | 165.3 | 166.6 | 168.2 | 0.7%      |
| Chemical and Allied Products                    | 288.3 | 295.1 | 300.6 | 306.9 | 314.9 | 320.7 | 326.5 | 331.1 | 336.6 | 341.9 | 346.9 | 352.7 | 357.2 | 363.3 | 369.9 | 376.5 | 382.4 | 387.6 | 393.6 | 399.3 | 405.7 | 412.3 | 1.6%      |
| Bulk Chemicals                                  | 155.6 | 156.0 | 158.1 | 160.1 | 163.6 | 165.9 | 168.1 | 170.1 | 172.3 | 174.5 | 176.4 | 178.5 | 179.9 | 182.5 | 185.0 | 187.3 | 189.1 | 190.4 | 192.1 | 193.6 | 195.6 | 197.8 | 1.1%      |
| Other Chemicals and<br>Allied Products          | 132.7 | 139.1 | 142.5 | 146.8 | 151.2 | 154.8 | 158.3 | 161.0 | 164.3 | 167.4 | 170.5 | 174.3 | 177.3 | 180.8 | 184.9 | 189.2 | 193.3 | 197.2 | 201.4 | 205.7 | 210.0 | 214.5 | 2.2%      |
| Petroleum and Coal Products                     | 156.3 | 159.6 | 160.8 | 163.3 | 164.4 | 167.1 | 169.7 | 172.0 | 174.7 | 175.5 | 176.2 | 176.9 | 176.9 | 177.5 | 178.2 | 179.0 | 180.1 | 180.3 | 181.1 | 181.6 | 182.3 | 183.1 | 0.7%      |
| Petroleum Refining                              | 140.6 | 143.5 | 144.5 | 146.8 | 147.6 | 150.1 | 152.6 | 154.6 | 157.2 | 157.9 | 158.4 | 159.0 | 158.9 | 159.4 | 159.9 | 160.4 | 161.2 | 161.4 | 162.0 | 162.4 | 163.0 | 163.6 | 0.7%      |
| Other Petroleum and<br>Coal Products            | 15.7  | 16.1  | 16.3  | 16.5  | 16.7  | 16.9  | 17.2  | 17.3  | 17.5  | 17.7  | 17.8  | 17.9  | 18.0  | 18.1  | 18.3  | 18.6  | 18.8  | 18.9  | 19.0  | 19.2  | 19.4  | 19.5  | 1.0%      |
| Rubber and Miscellaneous                        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Plastic Products                                | 132.9 | 138.8 | 142.3 | 147.3 | 153.8 | 159.4 | 165.1 | 169.7 | 174.8 | 179.9 | 184.2 | 189.2 | 193.0 | 197.9 | 203.8 | 209.9 | 215.3 | 218.7 | 223.2 | 227.8 | 232.8 | 237.9 | 2.7%      |
| Leather and Leather Products                    | 6.8   | 6.2   | 5.5   | 5.3   | 5.1   | 4.7   | 4.3   | 3.9   | 3.5   | 3.3   | 3.1   | 3.0   | 2.8   | 2.6   | 2.5   | 2.3   | 2.1   | 1.8   | 1.8   | 1.8   | 1.6   | 1.5   | -6.7%     |
| Stone, Clay, & Glass Products                   | 71.6  | 73.9  | 74.3  | 75.0  | 76.2  | 77.4  | 78.6  | 79.2  | 79.9  | 80.3  | 80.3  | 80.9  | 80.5  | 81.1  | 81.9  | 83.0  | 83.8  | 83.6  | 83.7  | 84.2  | 84.7  | 85.1  | 0.8%      |
| Glass and Glass Products                        | 19.3  | 19.8  | 19.9  | 20.1  | 20.5  | 20.8  | 21.0  | 21.2  | 21.5  | 21.8  | 22.0  | 22.2  | 22.4  | 22.7  | 22.9  | 23.2  | 23.4  | 23.5  | 23.5  | 23.6  | 23.7  | 23.7  | 0.9%      |
| Cement, Hydraulic                               | 5.0   | 5.0   | 5.1   | 5.1   | 5.1   | 5.2   | 5.3   | 5.3   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.5   | 5.5   | 5.6   | 5.6   | 5.6   | 5.6   | 5.7   | 5.7   | 0.6%      |
| Other Stone, Clay, &<br>Glass Products          | 47.3  | 49.0  | 49.3  | 49.8  | 50.5  | 51.4  | 52.2  | 52.6  | 53.0  | 53.2  | 53.0  | 53.2  | 52.7  | 53.0  | 53.5  | 54.3  | 54.9  | 54.5  | 54.6  | 54.9  | 55.4  | 55.7  | 0.7%      |

**Table 23. Industrial Sector Macroeconomic Indicators (2 of 2)**

|                                      | 1998          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 1998-2020   |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| Primary Metals Industry              | 149.7         | 149.4         | 151.8         | 153.8         | 156.9         | 159.4         | 161.5         | 161.7         | 163.1         | 164.0         | 164.0         | 165.0         | 164.7         | 166.0         | 167.2         | 168.5         | 169.2         | 169.1         | 169.4         | 169.7         | 170.5         | 171.1         | 0.6%        |
| Blast Furnace and Basic              |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Steel Products                       | 68.1          | 66.9          | 68.4          | 69.2          | 70.9          | 72.3          | 73.4          | 73.2          | 74.0          | 74.3          | 74.1          | 74.5          | 74.2          | 74.8          | 75.3          | 75.8          | 76.1          | 76.0          | 76.0          | 76.3          | 76.8          | 77.0          | 0.6%        |
| Aluminum                             | 30.1          | 30.3          | 30.4          | 30.8          | 30.9          | 31.3          | 31.5          | 31.6          | 31.7          | 31.9          | 31.9          | 32.0          | 32.1          | 32.3          | 32.5          | 32.7          | 32.8          | 33.0          | 33.0          | 33.0          | 33.1          | 33.3          | 0.5%        |
| Other Primary Metal Products         | 51.5          | 52.2          | 52.9          | 53.8          | 55.0          | 55.8          | 56.6          | 56.8          | 57.4          | 57.9          | 58.0          | 58.4          | 58.4          | 58.8          | 59.4          | 59.9          | 60.3          | 60.0          | 60.3          | 60.4          | 60.6          | 60.7          | 0.8%        |
| Fabricated Metal Products            | 186.6         | 191.9         | 193.9         | 198.8         | 205.7         | 209.4         | 213.7         | 215.9         | 218.6         | 220.4         | 221.6         | 223.7         | 224.5         | 226.4         | 229.5         | 233.2         | 236.1         | 236.5         | 237.6         | 238.9         | 241.4         | 243.3         | 1.2%        |
| Industrial Machinery and             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Equipment                            | 333.6         | 343.0         | 357.8         | 379.1         | 395.3         | 407.4         | 421.0         | 431.4         | 443.4         | 456.1         | 464.4         | 476.0         | 483.6         | 493.0         | 508.4         | 525.3         | 544.3         | 555.3         | 567.2         | 580.9         | 596.1         | 611.2         | 2.8%        |
| Electronic and Other Electric        |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Equipment                            | 389.0         | 431.0         | 458.5         | 494.8         | 529.4         | 559.3         | 588.7         | 620.8         | 654.0         | 686.1         | 713.5         | 741.2         | 769.1         | 802.2         | 833.3         | 861.8         | 892.4         | 919.5         | 952.6         | 981.6         | 1005.7        | 1027.5        | 4.5%        |
| Transportation Equipment             | 425.0         | 418.2         | 413.5         | 422.3         | 443.3         | 452.7         | 465.9         | 473.3         | 486.7         | 499.5         | 509.4         | 522.6         | 531.9         | 542.6         | 559.5         | 574.9         | 588.0         | 590.6         | 599.7         | 610.3         | 623.2         | 636.6         | 1.9%        |
| Instruments & Related Products       | 129.1         | 136.6         | 139.0         | 142.9         | 147.3         | 151.1         | 154.8         | 159.0         | 163.4         | 167.9         | 172.6         | 177.1         | 180.8         | 184.4         | 188.9         | 194.1         | 199.5         | 203.0         | 205.9         | 208.6         | 211.4         | 214.4         | 2.3%        |
| Miscellaneous Manufacturing          |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Industries                           | 43.3          | 44.4          | 44.7          | 45.5          | 45.9          | 46.6          | 47.2          | 47.3          | 47.6          | 47.8          | 48.1          | 48.7          | 49.2          | 49.8          | 51.0          | 52.1          | 53.2          | 53.4          | 53.5          | 53.8          | 54.3          | 54.9          | 1.1%        |
| <b>Total Industrial Gross Output</b> | <b>4125.9</b> | <b>4244.5</b> | <b>4309.9</b> | <b>4426.0</b> | <b>4554.6</b> | <b>4659.5</b> | <b>4769.9</b> | <b>4857.3</b> | <b>4957.4</b> | <b>5050.5</b> | <b>5122.8</b> | <b>5216.4</b> | <b>5286.7</b> | <b>5379.0</b> | <b>5493.0</b> | <b>5612.8</b> | <b>5730.1</b> | <b>5798.5</b> | <b>5888.1</b> | <b>5979.7</b> | <b>6076.8</b> | <b>6170.9</b> | <b>1.8%</b> |

GDP = Gross domestic product.

Emp. = Employment.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports.

Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998: Standard & Poors DRI, Simulation T250899. Projections: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 24. Refining Industry Energy Consumption (1 of 1)**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |       |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|
| Industry Output (billion 1987 \$)               | 140.64 | 143.49 | 144.48 | 146.78 | 147.63 | 150.14 | 152.56 | 154.62 | 157.23 | 157.87 | 158.44 | 159.01 | 158.93 | 159.44 | 159.87 | 160.43 | 161.25 | 161.43 | 162.03 | 162.42 | 162.95 | 163.63 | 0.7%      |       |
| Energy Consumption (trillion Btu)               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Residual Oil                                    | 31.2   | 12.0   | 12.1   | 12.0   | 12.0   | 12.0   | 11.9   | 25.9   | 21.8   | 38.7   | 40.5   | 40.6   | 38.0   | 41.0   | 41.1   | 41.4   | 41.6   | 41.8   | 42.2   | 42.5   | 42.7   | 43.0   | 1.5%      |       |
| Distillate Oil                                  | 4.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0       | N/A   |
| Liquefied Petroleum Gas                         | 14.0   | 0.0    | 4.0    | 6.2    | 0.0    | 0.0    | 0.0    | 0.0    | 7.3    | 13.2   | 14.5   | 15.7   | 6.9    | 7.0    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9       | -3.2% |
| Petroleum Coke                                  | 589.2  | 568.8  | 621.0  | 621.8  | 612.7  | 669.9  | 713.3  | 735.3  | 758.8  | 771.8  | 802.5  | 818.5  | 832.8  | 838.3  | 843.4  | 835.9  | 841.4  | 838.3  | 823.2  | 828.1  | 834.7  | 838.8  | 1.6%      |       |
| Still Gas                                       | 1431.0 | 1625.6 | 1614.5 | 1603.4 | 1602.3 | 1572.4 | 1554.1 | 1548.3 | 1557.4 | 1530.6 | 1500.3 | 1487.4 | 1483.3 | 1473.7 | 1459.2 | 1471.5 | 1471.4 | 1473.5 | 1489.1 | 1475.8 | 1469.6 | 1463.8 | 0.1%      |       |
| Other Petroleum 2/                              | 32.8   | 32.1   | 35.5   | 33.9   | 32.7   | 32.4   | 31.6   | 31.1   | 23.4   | 18.3   | 17.6   | 15.2   | 24.7   | 27.1   | 27.0   | 17.7   | 26.0   | 12.8   | 27.4   | 11.5   | 10.0   | 24.6   | -1.3%     |       |
| Petroleum Subtotal                              | 2102.6 | 2238.5 | 2287.1 | 2277.3 | 2259.7 | 2286.7 | 2310.9 | 2340.6 | 2368.6 | 2372.6 | 2375.5 | 2377.4 | 2385.7 | 2387.1 | 2377.5 | 2373.3 | 2387.3 | 2373.3 | 2388.9 | 2364.9 | 2364.0 | 2377.1 | 0.6%      |       |
| Natural Gas                                     | 902.6  | 900.7  | 903.5  | 906.2  | 920.8  | 930.5  | 942.2  | 954.8  | 964.2  | 972.9  | 972.5  | 971.3  | 969.5  | 966.3  | 964.0  | 961.8  | 960.0  | 957.5  | 955.2  | 953.6  | 951.6  | 950.2  | 0.2%      |       |
| Steam Coal                                      | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A       |       |
| Purchased Electricity                           | 111.2  | 123.7  | 126.5  | 128.1  | 129.0  | 128.1  | 128.2  | 131.4  | 136.9  | 135.0  | 131.6  | 128.9  | 125.0  | 122.4  | 119.7  | 119.1  | 123.2  | 122.8  | 122.4  | 121.0  | 119.0  | 117.4  | 0.2%      |       |
| Total   | 3117.2 | 3262.9 | 3317.1 | 3311.6 | 3309.5 | 3345.3 | 3381.4 | 3426.8 | 3469.8 | 3480.6 | 3479.6 | 3477.6 | 3480.1 | 3475.8 | 3461.2 | 3454.2 | 3470.4 | 3453.6 | 3466.5 | 3439.5 | 3434.5 | 3444.7 | 0.5%      |       |
| Energy Consumption per Unit of                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Output (thousand Btu per 1987 dollar of output) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Residual Oil                                    | 0.22   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.17   | 0.14   | 0.25   | 0.26   | 0.26   | 0.24   | 0.26   | 0.26   | 0.26   | 0.26   | 0.26   | 0.26   | 0.26   | 0.26   | 0.26   | 0.8%      |       |
| Distillate Oil                                  | 0.03   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |       |
| Liquefied Petroleum Gas                         | 0.10   | 0.00   | 0.03   | 0.04   | 0.00   | 0.00   | 0.00   | 0.00   | 0.05   | 0.08   | 0.09   | 0.10   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04      | -3.8% |
| Petroleum Coke                                  | 4.19   | 3.96   | 4.30   | 4.24   | 4.15   | 4.46   | 4.68   | 4.76   | 4.83   | 4.89   | 5.07   | 5.15   | 5.24   | 5.26   | 5.28   | 5.21   | 5.22   | 5.19   | 5.08   | 5.10   | 5.12   | 5.13   | 0.9%      |       |
| Still Gas                                       | 10.18  | 11.33  | 11.17  | 10.92  | 10.85  | 10.47  | 10.19  | 10.01  | 9.91   | 9.70   | 9.47   | 9.35   | 9.33   | 9.24   | 9.13   | 9.17   | 9.13   | 9.13   | 9.19   | 9.09   | 9.02   | 8.95   | -0.6%     |       |
| Other Petroleum 2/                              | 0.23   | 0.22   | 0.25   | 0.23   | 0.22   | 0.22   | 0.21   | 0.20   | 0.15   | 0.12   | 0.11   | 0.10   | 0.16   | 0.17   | 0.17   | 0.11   | 0.16   | 0.08   | 0.17   | 0.07   | 0.06   | 0.15   | -2.0%     |       |
| Petroleum Subtotal                              | 14.95  | 15.60  | 15.83  | 15.52  | 15.31  | 15.23  | 15.15  | 15.14  | 15.07  | 15.03  | 14.99  | 14.95  | 15.01  | 14.97  | 14.87  | 14.79  | 14.80  | 14.70  | 14.74  | 14.56  | 14.51  | 14.53  | -0.1%     |       |
| Natural Gas                                     | 6.42   | 6.28   | 6.25   | 6.17   | 6.24   | 6.20   | 6.18   | 6.18   | 6.13   | 6.16   | 6.14   | 6.11   | 6.10   | 6.06   | 6.03   | 5.99   | 5.95   | 5.93   | 5.89   | 5.87   | 5.84   | 5.81   | -0.5%     |       |
| Steam Coal                                      | 0.01   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |       |
| Purchased Electricity                           | 0.79   | 0.86   | 0.88   | 0.87   | 0.87   | 0.85   | 0.84   | 0.85   | 0.87   | 0.86   | 0.83   | 0.81   | 0.79   | 0.77   | 0.75   | 0.74   | 0.76   | 0.76   | 0.76   | 0.75   | 0.73   | 0.72   | -0.4%     |       |
| Total   | 22.17  | 22.74  | 22.96  | 22.56  | 22.42  | 22.28  | 22.16  | 22.16  | 22.07  | 22.05  | 21.96  | 21.87  | 21.90  | 21.80  | 21.65  | 21.53  | 21.52  | 21.39  | 21.39  | 21.18  | 21.08  | 21.05  | -0.2%     |       |
| Carbon Emissions (billion kg.)                  | 53.3   | 56.5   | 57.4   | 57.3   | 57.3   | 57.7   | 58.1   | 59.0   | 59.7   | 59.8   | 59.5   | 59.3   | 59.2   | 59.0   | 58.7   | 58.5   | 59.0   | 58.7   | 59.0   | 58.4   | 58.2   | 58.4   | 0.4%      |       |

1/ Fuel consumption includes consumption for cogeneration.  
 2/ Includes lubricants and miscellaneous petroleum products.  
 Btu = British thermal unit.  
 N/A = Not applicable.  
 \$ = Dollars  
 KG. = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 25. Food Industry Energy Consumption (1 of 1)**

1998-

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |       |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| Industry Output (billion 1987 \$)   | 409.86 | 421.54 | 425.65 | 429.94 | 433.59 | 437.69 | 442.61 | 446.68 | 450.72 | 454.50 | 457.95 | 462.30 | 466.85 | 471.50 | 476.77 | 482.71 | 488.87 | 494.05 | 499.51 | 504.81 | 510.39 | 516.25 | 1.1%  |       |
| Energy Consumption (trillion Btu)   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |       |
| Residual Oil  | 26.5   | 24.7   | 25.9   | 26.2   | 26.4   | 26.7   | 27.1   | 27.5   | 27.8   | 28.0   | 28.1   | 28.2   | 28.4   | 28.6   | 28.8   | 29.2   | 29.5   | 29.7   | 30.1   | 30.4   | 30.7   | 30.9   | 0.7%  |       |
| Distillate Oil  | 19.9   | 18.3   | 19.2   | 19.4   | 19.6   | 19.9   | 20.2   | 20.4   | 20.6   | 20.8   | 20.8   | 20.9   | 21.0   | 21.2   | 21.3   | 21.6   | 21.8   | 22.0   | 22.2   | 22.4   | 22.6   | 22.8   | 0.6%  |       |
| Liquefied Petroleum Gas   | 5.4    | 4.9    | 5.1    | 5.2    | 5.2    | 5.4    | 5.5    | 5.6    | 5.7    | 5.7    | 5.7    | 5.7    | 5.8    | 5.8    | 5.8    | 5.9    | 5.9    | 6.0    | 6.0    | 6.1    | 6.1    | 6.2    | 0.6%  |       |
| Other Petroleum 2/  | 92.6   | 89.6   | 93.6   | 94.8   | 96.1   | 97.7   | 99.7   | 101.5  | 103.1  | 104.6  | 105.5  | 106.7  | 108.1  | 109.6  | 111.2  | 113.2  | 115.1  | 116.8  | 118.6  | 120.3  | 122.1  | 124.3  | 1.3%  |       |
| Petroleum Subtotal  | 144.5  | 137.5  | 143.9  | 145.5  | 147.4  | 149.6  | 152.5  | 155.0  | 157.2  | 159.0  | 160.0  | 161.6  | 163.2  | 165.1  | 167.2  | 169.8  | 172.3  | 174.5  | 176.9  | 179.1  | 181.5  | 184.2  | 1.1%  |       |
| Natural Gas   | 654.5  | 678.8  | 678.2  | 682.0  | 684.3  | 686.4  | 689.3  | 691.2  | 693.4  | 695.9  | 699.1  | 704.1  | 709.6  | 715.3  | 722.3  | 730.4  | 739.3  | 746.6  | 754.7  | 762.7  | 770.7  | 778.7  | 0.8%  |       |
| Steam Coal  | 156.9  | 158.1  | 158.3  | 158.6  | 158.9  | 159.3  | 159.8  | 160.2  | 160.6  | 160.8  | 161.0  | 161.3  | 161.6  | 161.8  | 162.1  | 162.3  | 162.6  | 162.9  | 163.1  | 163.4  | 163.8  | 164.4  | 0.2%  |       |
| Renewables  | 12.3   | 12.8   | 12.9   | 13.1   | 13.2   | 13.3   | 13.5   | 13.6   | 13.8   | 13.9   | 14.0   | 14.1   | 14.3   | 14.4   | 14.6   | 14.8   | 15.0   | 15.2   | 15.4   | 15.5   | 15.7   | 15.9   | 1.2%  |       |
| Purchased Electricity   | 209.8  | 216.2  | 217.9  | 220.2  | 222.1  | 224.2  | 227.1  | 229.1  | 231.1  | 233.0  | 234.6  | 236.4  | 238.8  | 241.0  | 243.5  | 246.3  | 249.3  | 252.0  | 254.8  | 257.5  | 260.6  | 263.8  | 1.0%  |       |
| Total   | 1178.0 | 1203.4 | 1211.1 | 1219.3 | 1225.8 | 1232.9 | 1242.1 | 1249.2 | 1256.0 | 1262.6 | 1268.8 | 1277.5 | 1287.4 | 1297.8 | 1309.7 | 1323.6 | 1338.5 | 1351.2 | 1364.9 | 1378.2 | 1392.3 | 1407.0 | 0.8%  |       |
| Energy Consumption per Unit of Output<br>(thousand Btu per 1987 dollar of output) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |       |
| Residual Oil  | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | -0.3% |       |
| Distillate Oil  | 0.05   | 0.04   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04  | -0.4% |
| Liquefied Petroleum Gas   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01  | -0.5% |
| Other Petroleum 2/  | 0.23   | 0.21   | 0.22   | 0.22   | 0.22   | 0.22   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.24   | 0.24   | 0.24   | 0.24   | 0.24   | 0.24   | 0.24  | 0.3%  |
| Petroleum Subtotal  | 0.35   | 0.33   | 0.34   | 0.34   | 0.34   | 0.34   | 0.34   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.36   | 0.36   | 0.1%  |       |
| Natural Gas   | 1.60   | 1.61   | 1.59   | 1.59   | 1.58   | 1.57   | 1.56   | 1.55   | 1.54   | 1.53   | 1.53   | 1.52   | 1.52   | 1.52   | 1.52   | 1.51   | 1.51   | 1.51   | 1.51   | 1.51   | 1.51   | 1.51   | 1.51  | -0.3% |
| Steam Coal  | 0.38   | 0.38   | 0.37   | 0.37   | 0.37   | 0.36   | 0.36   | 0.36   | 0.36   | 0.35   | 0.35   | 0.35   | 0.35   | 0.34   | 0.34   | 0.33   | 0.33   | 0.33   | 0.33   | 0.32   | 0.32   | 0.32   | 0.32  | -0.8% |
| Renewables  | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03  | 0.1%  |
| Purchased Electricity   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51  | 0.0%  |
| Total   | 2.87   | 2.85   | 2.85   | 2.84   | 2.83   | 2.82   | 2.81   | 2.80   | 2.79   | 2.78   | 2.77   | 2.76   | 2.76   | 2.75   | 2.75   | 2.74   | 2.74   | 2.73   | 2.73   | 2.73   | 2.73   | 2.73   | 2.73  | -0.2% |
| Carbon Emissions (bill. Kg.)  | 26.8   | 27.7   | 27.9   | 28.1   | 28.4   | 28.6   | 28.8   | 29.0   | 29.2   | 29.3   | 29.4   | 29.6   | 29.8   | 30.0   | 30.2   | 30.6   | 31.0   | 31.3   | 31.6   | 31.9   | 32.2   | 32.6   | 0.9%  |       |

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit.

Bill = Billion

N/A = Not applicable.

\$ = Dollars.

KG = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 26. Paper Industry Energy Consumption (1 of 1)**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Industry Output (billion 1987 \$)   | 127.62 | 132.09 | 134.52 | 136.66 | 139.09 | 141.24 | 143.41 | 145.05 | 146.64 | 148.14 | 149.33 | 150.89 | 151.83 | 153.18 | 154.83 | 156.81 | 158.78 | 160.10 | 161.31 | 162.55 | 164.00 | 165.56 | 1.2%  |
| Energy Consumption (trillion Btu)   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Residual Oil  | 159.2  | 146.2  | 152.9  | 153.3  | 154.6  | 156.0  | 157.8  | 158.9  | 159.6  | 159.9  | 159.0  | 158.7  | 157.7  | 157.5  | 157.8  | 159.2  | 160.9  | 161.9  | 163.0  | 163.9  | 165.3  | 166.7  | 0.2%  |
| Distillate Oil  | 12.1   | 11.2   | 11.6   | 11.7   | 11.8   | 12.0   | 12.1   | 12.2   | 12.3   | 12.4   | 12.3   | 12.3   | 12.2   | 12.2   | 12.2   | 12.4   | 12.5   | 12.6   | 12.7   | 12.7   | 12.9   | 13.0   | 0.3%  |
| Liquefied Petroleum Gas   | 3.7    | 3.4    | 3.5    | 3.6    | 3.6    | 3.7    | 3.8    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 4.0    | 4.0    | 4.0    | 4.0    | 4.0    | 4.0    | 4.1    | 0.5%  |
| Other Petroleum 2/  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A   |
| Petroleum Subtotal  | 175.0  | 160.8  | 168.1  | 168.6  | 170.1  | 171.7  | 173.7  | 175.0  | 175.8  | 176.1  | 175.1  | 174.9  | 173.8  | 173.6  | 173.9  | 175.5  | 177.4  | 178.5  | 179.6  | 180.7  | 182.2  | 183.7  | 0.2%  |
| Natural Gas   | 648.0  | 669.3  | 668.1  | 670.8  | 674.8  | 676.0  | 676.7  | 674.3  | 671.6  | 669.2  | 666.3  | 665.3  | 661.0  | 659.7  | 660.8  | 665.6  | 671.6  | 674.6  | 677.5  | 681.3  | 686.5  | 693.1  | 0.3%  |
| Steam Coal  | 305.9  | 302.4  | 300.3  | 298.3  | 296.3  | 294.3  | 292.4  | 290.5  | 288.5  | 286.6  | 284.7  | 282.9  | 281.1  | 279.6  | 278.2  | 277.5  | 277.2  | 277.0  | 276.8  | 276.7  | 276.6  | 276.6  | -0.5% |
| Renewables  | 1373.6 | 1412.7 | 1436.9 | 1458.5 | 1482.7 | 1504.6 | 1526.8 | 1543.6 | 1559.9 | 1575.7 | 1588.3 | 1604.2 | 1614.4 | 1628.1 | 1644.8 | 1664.8 | 1684.8 | 1697.9 | 1710.0 | 1722.4 | 1737.0 | 1753.4 | 1.1%  |
| Purchased Electricity   | 252.3  | 261.4  | 262.8  | 265.6  | 268.8  | 271.7  | 274.9  | 277.0  | 279.0  | 280.9  | 282.3  | 284.1  | 285.4  | 287.2  | 289.5  | 292.4  | 295.6  | 297.9  | 300.1  | 302.4  | 305.3  | 308.5  | 0.9%  |
| Total   | 2754.8 | 2806.6 | 2836.2 | 2861.8 | 2892.6 | 2918.3 | 2944.5 | 2960.4 | 2974.8 | 2988.6 | 2996.7 | 3011.4 | 3015.7 | 3028.3 | 3047.3 | 3075.9 | 3106.5 | 3125.9 | 3144.2 | 3163.5 | 3187.6 | 3215.3 | 0.7%  |
| Energy Consumption per Unit of Output<br>(thousand Btu per 1987 dollar of output) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Residual Oil  | 1.25   | 1.11   | 1.14   | 1.12   | 1.11   | 1.10   | 1.10   | 1.10   | 1.09   | 1.08   | 1.06   | 1.05   | 1.04   | 1.03   | 1.02   | 1.02   | 1.01   | 1.01   | 1.01   | 1.01   | 1.01   | 1.01   | -1.0% |
| Distillate Oil  | 0.09   | 0.08   | 0.09   | 0.09   | 0.09   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | 0.08   | -0.9% |
| Liquefied Petroleum Gas   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | -0.7% |
| Other Petroleum 2/  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Petroleum Subtotal  | 1.37   | 1.22   | 1.25   | 1.23   | 1.22   | 1.22   | 1.21   | 1.21   | 1.20   | 1.19   | 1.17   | 1.16   | 1.14   | 1.13   | 1.12   | 1.12   | 1.12   | 1.12   | 1.11   | 1.11   | 1.11   | 1.11   | -1.0% |
| Natural Gas   | 5.08   | 5.07   | 4.97   | 4.91   | 4.85   | 4.79   | 4.72   | 4.65   | 4.58   | 4.52   | 4.46   | 4.41   | 4.35   | 4.31   | 4.27   | 4.24   | 4.23   | 4.21   | 4.20   | 4.19   | 4.19   | 4.19   | -0.9% |
| Steam Coal  | 2.40   | 2.29   | 2.23   | 2.18   | 2.13   | 2.08   | 2.04   | 2.00   | 1.97   | 1.93   | 1.91   | 1.87   | 1.85   | 1.83   | 1.80   | 1.77   | 1.75   | 1.73   | 1.72   | 1.70   | 1.69   | 1.67   | -1.6% |
| Renewables  | 10.76  | 10.69  | 10.68  | 10.67  | 10.66  | 10.65  | 10.65  | 10.64  | 10.64  | 10.64  | 10.64  | 10.63  | 10.63  | 10.63  | 10.62  | 10.62  | 10.61  | 10.60  | 10.60  | 10.60  | 10.59  | 10.59  | -0.1% |
| Purchased Electricity   | 1.98   | 1.98   | 1.95   | 1.94   | 1.93   | 1.92   | 1.92   | 1.91   | 1.90   | 1.90   | 1.89   | 1.88   | 1.88   | 1.88   | 1.87   | 1.86   | 1.86   | 1.86   | 1.86   | 1.86   | 1.86   | 1.86   | -0.3% |
| Total   | 21.59  | 21.25  | 21.08  | 20.94  | 20.80  | 20.66  | 20.53  | 20.41  | 20.29  | 20.17  | 20.07  | 19.96  | 19.86  | 19.77  | 19.68  | 19.62  | 19.56  | 19.52  | 19.49  | 19.46  | 19.44  | 19.42  | -0.5% |
| Carbon Emissions (bill. kg)   | 33.3   | 34.1   | 34.4   | 34.5   | 34.8   | 34.9   | 35.1   | 35.1   | 35.1   | 35.1   | 35.0   | 34.9   | 34.8   | 34.8   | 34.9   | 35.2   | 35.6   | 35.7   | 35.9   | 36.1   | 36.4   | 36.6   | 0.4%  |

1/ Fuel consumption includes consumption for cogeneration.  
 2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.  
 Btu = British thermal unit.  
 Bill. = Billion.  
 N/A = Not applicable.  
 \$ = Dollars.  
 KG = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO99 National Energy Modeling System run AEO2000.D100198A.

**Table 27. Bulk Chemical Industry Energy Consumption (1 of 1)**

1998-

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Industry Output (billion 1987 \$)  | 155.59 | 156.05 | 158.08 | 160.07 | 163.61 | 165.88 | 168.14 | 170.09 | 172.32 | 174.47 | 176.38 | 178.46 | 179.89 | 182.47 | 184.98 | 187.26 | 189.06 | 190.41 | 192.15 | 193.59 | 195.62 | 197.83 | 1.1%  |
| Energy Consumption (trillion Btu)  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Heat and Power   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Residual Oil   | 53.3   | 48.6   | 50.8   | 51.2   | 52.3   | 53.2   | 54.3   | 55.3   | 56.3   | 57.2   | 57.6   | 58.2   | 58.6   | 59.4   | 60.1   | 61.0   | 61.6   | 62.1   | 62.7   | 63.2   | 63.9   | 64.6   | 0.9%  |
| Distillate Oil   | 6.5    | 5.6    | 5.7    | 5.8    | 5.9    | 6.0    | 6.1    | 6.2    | 6.3    | 6.4    | 6.4    | 6.4    | 6.5    | 6.6    | 6.6    | 6.7    | 6.7    | 6.8    | 6.8    | 6.8    | 6.9    | 6.9    | 0.3%  |
| Liquefied Petroleum Gas  | 1.9    | 1.7    | 1.7    | 1.7    | 1.8    | 1.8    | 1.9    | 1.9    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.1    | 2.1    | 2.1    | 2.2    | 2.2    | 2.2    | 2.2    | 2.2    | 0.7%  |
| Other Petroleum 2/   | 477.8  | 449.5  | 466.1  | 470.8  | 481.3  | 489.9  | 500.3  | 510.0  | 520.2  | 528.4  | 533.3  | 538.6  | 542.6  | 550.3  | 558.2  | 566.9  | 573.6  | 578.9  | 585.4  | 590.4  | 597.6  | 606.9  | 1.1%  |
| Petroleum Subtotal   | 539.4  | 505.3  | 524.3  | 529.5  | 541.2  | 550.9  | 562.5  | 573.4  | 584.8  | 593.9  | 599.3  | 605.2  | 609.8  | 618.3  | 627.1  | 636.6  | 644.0  | 649.9  | 657.1  | 662.6  | 670.6  | 680.6  | 1.1%  |
| Natural Gas  | 1794.3 | 1814.4 | 1817.9 | 1833.4 | 1865.0 | 1879.0 | 1889.9 | 1897.5 | 1908.4 | 1920.2 | 1932.7 | 1947.8 | 1953.6 | 1971.4 | 1991.8 | 2011.9 | 2027.6 | 2038.3 | 2053.2 | 2066.4 | 2085.0 | 2103.9 | 0.7%  |
| Steam Coal   | 207.1  | 207.9  | 208.1  | 208.3  | 208.4  | 208.6  | 208.8  | 209.1  | 209.3  | 209.5  | 209.6  | 209.8  | 209.9  | 210.1  | 210.2  | 210.3  | 210.4  | 210.6  | 210.7  | 210.9  | 211.0  | 211.2  | 0.1%  |
| Purchased Electricity  | 474.6  | 477.9  | 484.2  | 492.2  | 506.0  | 515.5  | 525.8  | 534.0  | 543.1  | 551.8  | 559.4  | 566.7  | 573.0  | 583.3  | 593.2  | 601.8  | 609.2  | 615.2  | 622.5  | 628.7  | 637.7  | 647.5  | 1.4%  |
| Total Heat and Power   | 3015.4 | 3005.5 | 3034.5 | 3063.4 | 3120.6 | 3154.0 | 3187.0 | 3214.0 | 3245.7 | 3275.5 | 3301.1 | 3329.5 | 3346.3 | 3383.1 | 3422.2 | 3460.7 | 3491.2 | 3514.0 | 3543.6 | 3568.5 | 3604.3 | 3643.3 | 0.9%  |
| Feedstock  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Liquefied Petroleum Gas  | 1625.2 | 1626.7 | 1645.4 | 1663.8 | 1697.8 | 1718.9 | 1740.1 | 1758.3 | 1779.3 | 1799.5 | 1817.4 | 1836.9 | 1850.1 | 1874.6 | 1898.6 | 1920.2 | 1937.1 | 1949.5 | 1965.7 | 1979.0 | 1998.2 | 2019.2 | 1.0%  |
| Petrochemical Feedstocks   | 1313.1 | 1314.3 | 1329.5 | 1344.4 | 1371.8 | 1388.9 | 1406.0 | 1420.7 | 1437.7 | 1454.0 | 1468.4 | 1484.2 | 1494.9 | 1514.7 | 1534.1 | 1551.6 | 1565.2 | 1575.2 | 1588.3 | 1599.0 | 1614.5 | 1631.5 | 1.0%  |
| Natural Gas  | 715.8  | 716.4  | 724.7  | 732.8  | 747.8  | 757.1  | 766.4  | 774.4  | 783.7  | 792.6  | 800.4  | 809.0  | 814.9  | 825.7  | 836.2  | 845.7  | 853.2  | 858.6  | 865.8  | 871.6  | 880.1  | 889.3  | 1.0%  |
| Total Feedstocks   | 3654.1 | 3657.4 | 3699.7 | 3741.0 | 3817.3 | 3864.8 | 3912.5 | 3953.4 | 4000.6 | 4046.1 | 4086.3 | 4130.1 | 4159.8 | 4214.9 | 4268.8 | 4317.5 | 4355.4 | 4383.3 | 4419.7 | 4449.6 | 4492.8 | 4540.0 | 1.0%  |
| Total  | 6669.5 | 6663.0 | 6734.2 | 6804.4 | 6937.9 | 7018.8 | 7099.6 | 7167.4 | 7246.3 | 7321.6 | 7387.3 | 7459.6 | 7506.1 | 7598.0 | 7691.0 | 7778.2 | 7846.5 | 7897.3 | 7963.3 | 8018.1 | 8097.1 | 8183.3 | 0.9%  |
| Consumption per Unit of Output<br>(thousand Btu per 1987 dollar of output) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Heat and Power   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Residual Oil   | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | -0.2% |
| Distillate Oil   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -0.8% |
| Liquefied Petroleum Gas  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -0.4% |
| Other Petroleum  | 3.1    | 2.9    | 2.9    | 2.9    | 2.9    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.1    | 3.1    | 0.0%  |
| Petroleum Subtotal   | 3.5    | 3.2    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 0.0%  |
| Natural Gas 2/   | 11.5   | 11.6   | 11.5   | 11.5   | 11.4   | 11.3   | 11.2   | 11.1   | 11.0   | 11.0   | 10.9   | 10.9   | 10.8   | 10.8   | 10.8   | 10.7   | 10.7   | 10.7   | 10.7   | 10.7   | 10.7   | 10.6   | -0.4% |
| Steam Coal   | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | -1.0% |
| Purchased Electricity  | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.2    | 3.3    | 3.3    | 0.3%  |
| Total Heat and Power   | 19.4   | 19.3   | 19.2   | 19.1   | 19.1   | 19.0   | 19.0   | 18.9   | 18.8   | 18.8   | 18.7   | 18.7   | 18.6   | 18.5   | 18.5   | 18.5   | 18.5   | 18.5   | 18.4   | 18.4   | 18.4   | 18.4   | -0.2% |
| Feedstock  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Liquefied Petroleum Gas  | 10.4   | 10.4   | 10.4   | 10.4   | 10.4   | 10.4   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 10.3   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | -0.1% |
| Petrochemical Feedstocks   | 8.4    | 8.4    | 8.4    | 8.4    | 8.4    | 8.4    | 8.4    | 8.4    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.2    | -0.1% |
| Natural Gas 2/   | 4.6    | 4.6    | 4.6    | 4.6    | 4.6    | 4.6    | 4.6    | 4.6    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | -0.1% |
| Total Feedstocks   | 23.5   | 23.4   | 23.4   | 23.4   | 23.3   | 23.3   | 23.3   | 23.2   | 23.2   | 23.2   | 23.2   | 23.1   | 23.1   | 23.1   | 23.1   | 23.0   | 23.0   | 23.0   | 23.0   | 23.0   | 23.0   | 22.9   | -0.1% |
| Total  | 42.9   | 42.7   | 42.6   | 42.5   | 42.4   | 42.3   | 42.2   | 42.1   | 42.1   | 42.0   | 41.9   | 41.8   | 41.7   | 41.6   | 41.6   | 41.5   | 41.5   | 41.5   | 41.4   | 41.4   | 41.4   | 41.4   | -0.2% |
| Carbon Emissions (bill. kg)  | 84.2   | 84.8   | 85.9   | 86.8   | 88.7   | 89.9   | 91.0   | 92.0   | 93.1   | 94.0   | 94.7   | 95.5   | 96.1   | 97.2   | 98.5   | 99.7   | 100.9  | 101.5  | 102.6  | 103.3  | 104.4  | 105.5  | 1.0%  |

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit. N/A = Not applicable. \$ = Dollars Bill. = Billion

KG = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports.

Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 28. Glass Industry Energy Consumption (1 of 1)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
| Industry Output (billion 1987 \$)   | 19.32 | 19.80 | 19.91 | 20.07 | 20.48 | 20.79 | 21.04 | 21.24 | 21.53 | 21.81 | 22.02 | 22.25 | 22.40 | 22.66 | 22.93 | 23.19 | 23.39 | 23.45 | 23.54 | 23.59 | 23.65 | 23.68 | 0.9%      |       |
| Energy Consumption (trillion Btu)   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Residual Oil  | 4.9   | 4.3   | 4.6   | 4.6   | 4.7   | 4.8   | 4.9   | 5.0   | 5.1   | 5.1   | 5.1   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.3   | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   | 5.3       | 0.3%  |
| Distillate Oil  | 0.7   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.7   | 0.7   | 0.7   | 0.6   | 0.6   | 0.6   | 0.6       | -0.3% |
| Liquefied Petroleum Gas   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6       | 0.4%  |
| Petroleum Subtotal  | 6.1   | 5.3   | 5.6   | 5.6   | 5.8   | 5.9   | 6.0   | 6.1   | 6.2   | 6.3   | 6.3   | 6.3   | 6.3   | 6.4   | 6.4   | 6.5   | 6.5   | 6.5   | 6.5   | 6.4   | 6.4   | 6.5   | 6.5       | 0.3%  |
| Natural Gas   | 169.1 | 171.5 | 171.0 | 171.2 | 173.3 | 174.5 | 175.1 | 175.4 | 176.5 | 177.4 | 177.9 | 178.6 | 178.7 | 179.6 | 180.6 | 181.7 | 182.3 | 181.9 | 181.7 | 181.3 | 181.1 | 180.8 | 180.8     | 0.3%  |
| Purchased Electricity   | 32.7  | 33.6  | 33.7  | 34.0  | 34.7  | 35.3  | 35.8  | 36.1  | 36.6  | 37.0  | 37.3  | 37.6  | 37.8  | 38.2  | 38.5  | 38.8  | 39.1  | 39.1  | 39.2  | 39.2  | 39.3  | 39.4  | 39.4      | 0.8%  |
| Total   | 207.9 | 210.4 | 210.4 | 210.9 | 213.8 | 215.6 | 216.9 | 217.6 | 219.3 | 220.7 | 221.5 | 222.5 | 222.8 | 224.1 | 225.5 | 227.0 | 227.8 | 227.5 | 227.4 | 227.0 | 226.9 | 226.7 | 226.7     | 0.4%  |
| Energy Consumption per Unit of Output<br>(thousand Btu per 1987 dollar of output) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Residual Oil  | 0.26  | 0.22  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.24  | 0.24  | 0.24  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22      | -0.6% |
| Distillate Oil  | 0.04  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03      | -1.2% |
| Liquefied Petroleum Gas   | 0.03  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02      | -0.5% |
| Petroleum Subtotal  | 0.32  | 0.27  | 0.28  | 0.28  | 0.28  | 0.28  | 0.29  | 0.29  | 0.29  | 0.29  | 0.29  | 0.28  | 0.28  | 0.28  | 0.28  | 0.28  | 0.28  | 0.28  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27      | -0.7% |
| Natural Gas   | 8.75  | 8.66  | 8.59  | 8.53  | 8.46  | 8.39  | 8.32  | 8.26  | 8.19  | 8.13  | 8.08  | 8.03  | 7.98  | 7.92  | 7.88  | 7.83  | 7.79  | 7.76  | 7.72  | 7.69  | 7.66  | 7.64  | 7.64      | -0.6% |
| Purchased Electricity   | 1.69  | 1.70  | 1.69  | 1.70  | 1.70  | 1.70  | 1.70  | 1.70  | 1.70  | 1.70  | 1.69  | 1.69  | 1.69  | 1.68  | 1.68  | 1.67  | 1.67  | 1.67  | 1.67  | 1.66  | 1.66  | 1.66  | 1.66      | -0.1% |
| Total   | 10.76 | 10.63 | 10.57 | 10.51 | 10.44 | 10.37 | 10.31 | 10.25 | 10.18 | 10.12 | 10.06 | 10.00 | 9.95  | 9.89  | 9.84  | 9.79  | 9.74  | 9.70  | 9.66  | 9.62  | 9.59  | 9.57  | 9.57      | -0.5% |
| Carbon Emissions (bill. kg)   | 4.2   | 4.3   | 4.3   | 4.3   | 4.4   | 4.5   | 4.5   | 4.5   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.7   | 4.7   | 4.7   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.7       | 0.6%  |

1/ Fuel consumption includes consumption for cogeneration.

Btu = British thermal unit.

Bill. = Billion.

N/A = Not applicable.

\$ = Dollars.

KG = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 29. Cement Industry Energy Consumption (1 of 1)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |      |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Industry Output (billion 1987 \$)   | 4.96  | 5.04  | 5.07  | 5.08  | 5.14  | 5.21  | 5.29  | 5.32  | 5.35  | 5.37  | 5.36  | 5.41  | 5.38  | 5.44  | 5.48  | 5.54  | 5.57  | 5.57  | 5.60  | 5.63  | 5.66  | 5.71  | 0.6%  |      |
| Energy Consumption (trillion Btu)   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Residual Oil  | 1.5   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | -1.7% |      |
| Distillate Oil  | 3.5   | 2.6   | 2.7   | 2.6   | 2.6   | 2.6   | 2.6   | 2.5   | 2.5   | 2.5   | 2.4   | 2.4   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.2   | 2.2   | 2.2   | -2.2% |      |
| Other Petroleum 2/  | 73.8  | 74.1  | 74.1  | 73.7  | 74.2  | 74.6  | 75.3  | 75.2  | 75.2  | 74.9  | 74.5  | 74.6  | 73.9  | 74.2  | 74.4  | 74.7  | 74.6  | 74.4  | 74.4  | 74.4  | 74.5  | 74.6  | 74.9  | 0.1% |
| Petroleum Subtotal  | 78.8  | 77.9  | 78.0  | 77.6  | 78.0  | 78.4  | 79.0  | 78.9  | 78.9  | 78.6  | 78.0  | 78.1  | 77.4  | 77.7  | 77.8  | 78.0  | 78.0  | 77.7  | 77.7  | 77.7  | 77.8  | 78.1  | 0.0%  |      |
| Natural Gas   | 27.3  | 25.7  | 25.4  | 24.8  | 24.5  | 23.9  | 23.3  | 22.7  | 22.1  | 21.6  | 21.2  | 21.0  | 20.6  | 20.4  | 20.2  | 20.2  | 19.9  | 19.6  | 19.4  | 19.3  | 19.1  | 18.9  | -1.7% |      |
| Steam Coal  | 262.0 | 265.3 | 265.0 | 263.6 | 265.1 | 267.0 | 269.6 | 269.8 | 269.9 | 268.9 | 267.3 | 267.6 | 264.9 | 265.8 | 266.2 | 267.0 | 266.9 | 266.0 | 266.4 | 266.5 | 267.1 | 268.4 | 0.1%  |      |
| Purchased Electricity   | 47.7  | 48.3  | 48.5  | 48.6  | 49.1  | 49.7  | 50.4  | 50.5  | 50.7  | 50.7  | 50.6  | 50.8  | 50.6  | 51.0  | 51.3  | 51.6  | 51.7  | 51.6  | 51.8  | 51.9  | 52.2  | 52.5  | 0.4%  |      |
| Total   | 415.8 | 417.2 | 416.9 | 414.5 | 416.6 | 419.0 | 422.4 | 421.9 | 421.6 | 419.8 | 417.1 | 417.5 | 413.4 | 414.8 | 415.5 | 416.8 | 416.5 | 414.9 | 415.3 | 415.5 | 416.2 | 417.8 | 0.0%  |      |
| Energy Consumption per Unit of Output<br>(thousand Btu per 1987 dollar of output) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Residual Oil  | 0.29  | 0.23  | 0.24  | 0.24  | 0.24  | 0.23  | 0.23  | 0.22  | 0.22  | 0.21  | 0.21  | 0.21  | 0.20  | 0.20  | 0.20  | 0.19  | 0.19  | 0.19  | 0.18  | 0.18  | 0.18  | 0.18  | -2.3% |      |
| Distillate Oil  | 0.71  | 0.52  | 0.52  | 0.52  | 0.50  | 0.49  | 0.48  | 0.48  | 0.47  | 0.46  | 0.44  | 0.44  | 0.44  | 0.43  | 0.42  | 0.42  | 0.41  | 0.41  | 0.40  | 0.40  | 0.39  | 0.38  | -2.8% |      |
| Other Petroleum 2/  | 14.89 | 14.70 | 14.61 | 14.53 | 14.43 | 14.32 | 14.22 | 14.13 | 14.05 | 13.97 | 13.89 | 13.81 | 13.74 | 13.65 | 13.56 | 13.47 | 13.39 | 13.34 | 13.29 | 13.23 | 13.18 | 13.12 | -0.6% |      |
| Petroleum Subtotal  | 15.90 | 15.45 | 15.38 | 15.28 | 15.17 | 15.05 | 14.93 | 14.83 | 14.73 | 14.64 | 14.55 | 14.45 | 14.38 | 14.28 | 14.18 | 14.09 | 14.00 | 13.94 | 13.87 | 13.81 | 13.75 | 13.68 | -0.7% |      |
| Natural Gas   | 5.51  | 5.09  | 5.00  | 4.89  | 4.76  | 4.59  | 4.41  | 4.26  | 4.13  | 4.03  | 3.96  | 3.89  | 3.82  | 3.75  | 3.69  | 3.64  | 3.58  | 3.52  | 3.47  | 3.43  | 3.37  | 3.31  | -2.3% |      |
| Steam Coal  | 52.87 | 52.60 | 52.22 | 51.92 | 51.57 | 51.26 | 50.94 | 50.68 | 50.41 | 50.12 | 49.83 | 49.50 | 49.22 | 48.87 | 48.54 | 48.20 | 47.90 | 47.73 | 47.54 | 47.36 | 47.17 | 47.03 | -0.5% |      |
| Purchased Electricity   | 9.62  | 9.59  | 9.56  | 9.57  | 9.55  | 9.53  | 9.52  | 9.50  | 9.47  | 9.45  | 9.44  | 9.40  | 9.40  | 9.37  | 9.35  | 9.31  | 9.28  | 9.27  | 9.24  | 9.23  | 9.21  | 9.20  | -0.2% |      |
| Total   | 83.91 | 82.73 | 82.17 | 81.66 | 81.05 | 80.43 | 79.80 | 79.27 | 78.74 | 78.25 | 77.78 | 77.24 | 76.81 | 76.27 | 75.76 | 75.23 | 74.76 | 74.46 | 74.13 | 73.82 | 73.50 | 73.22 | -0.6% |      |
| Carbon Emissions (bill. kg)   | 11.0  | 11.1  | 11.2  | 11.1  | 11.2  | 11.3  | 11.4  | 11.4  | 11.4  | 11.3  | 11.2  | 11.3  | 11.1  | 11.2  | 11.2  | 11.2  | 11.3  | 11.2  | 11.2  | 11.3  | 11.3  | 11.3  | 0.1%  |      |

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit.

Bill. = Billion.

N/A = Not applicable.

\$ = Dollars.

KG = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 30. Iron and Steel Industries Energy Consumption (1 of 1)**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Industry Output (billion 1987 \$)   | 68.06  | 66.92  | 68.43  | 69.16  | 70.94  | 72.34  | 73.39  | 73.22  | 73.98  | 74.33  | 74.05  | 74.54  | 74.24  | 74.83  | 75.33  | 75.83  | 76.10  | 76.03  | 76.01  | 76.28  | 76.76  | 77.03  | 0.6%  |
| Energy Consumption (trillion Btu)   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Residual Oil  | 44.9   | 39.2   | 41.5   | 41.5   | 42.4   | 43.1   | 43.8   | 43.6   | 43.9   | 43.7   | 42.9   | 42.7   | 42.0   | 41.9   | 41.8   | 41.7   | 41.5   | 41.1   | 40.8   | 40.7   | 40.8   | 41.0   | -0.4% |
| Other Petroleum 2/  | 52.7   | 47.4   | 48.8   | 48.8   | 50.2   | 51.2   | 51.8   | 51.0   | 51.1   | 50.8   | 49.7   | 49.4   | 48.3   | 48.1   | 47.9   | 47.8   | 47.3   | 46.5   | 45.8   | 45.5   | 45.5   | 45.3   | -0.7% |
| Petroleum Subtotal  | 97.7   | 86.5   | 90.3   | 90.2   | 92.6   | 94.4   | 95.6   | 94.6   | 95.0   | 94.5   | 92.6   | 92.0   | 90.3   | 90.0   | 89.7   | 89.5   | 88.9   | 87.7   | 86.6   | 86.2   | 86.3   | 86.3   | -0.6% |
| Natural Gas   | 495.1  | 486.3  | 488.7  | 489.3  | 494.6  | 497.7  | 498.3  | 493.8  | 493.7  | 492.5  | 489.0  | 489.3  | 485.6  | 486.2  | 486.8  | 487.8  | 487.9  | 486.2  | 485.1  | 485.4  | 486.7  | 486.8  | -0.1% |
| Metallurgical Coal  | 795.0  | 767.9  | 754.5  | 741.3  | 728.3  | 715.6  | 703.1  | 690.8  | 678.7  | 666.8  | 655.1  | 643.6  | 632.3  | 621.2  | 610.3  | 599.5  | 589.0  | 578.9  | 569.0  | 559.3  | 549.7  | 540.4  | -1.7% |
| Net Coke Imports  | 89.8   | 96.4   | 113.0  | 124.0  | 141.3  | 156.4  | 169.2  | 174.0  | 184.6  | 192.7  | 196.7  | 205.3  | 209.1  | 218.1  | 226.6  | 234.9  | 241.7  | 246.5  | 251.5  | 258.4  | 266.5  | 273.2  | 5.2%  |
| Steam Coal  | 83.4   | 85.1   | 85.8   | 86.2   | 87.1   | 88.2   | 89.3   | 89.4   | 90.2   | 90.4   | 90.0   | 90.4   | 90.0   | 90.5   | 90.8   | 91.1   | 91.3   | 91.2   | 91.1   | 91.4   | 92.0   | 92.6   | 0.5%  |
| Coal Subtotal   | 968.2  | 949.4  | 953.3  | 951.5  | 956.8  | 960.2  | 961.6  | 954.2  | 953.5  | 949.9  | 941.7  | 939.3  | 931.4  | 929.8  | 927.7  | 925.5  | 921.9  | 916.6  | 911.7  | 909.1  | 908.2  | 906.3  | -0.3% |
| Purchased Electricity   | 161.6  | 159.1  | 163.2  | 165.8  | 171.4  | 176.1  | 180.1  | 179.9  | 182.5  | 183.8  | 183.4  | 184.7  | 184.3  | 186.3  | 187.9  | 189.4  | 190.2  | 190.4  | 190.5  | 191.6  | 193.6  | 195.0  | 0.9%  |
| Total   | 1722.6 | 1681.3 | 1695.5 | 1696.8 | 1715.4 | 1728.5 | 1735.7 | 1722.4 | 1724.7 | 1720.7 | 1706.7 | 1705.3 | 1691.6 | 1692.3 | 1692.1 | 1692.1 | 1688.9 | 1680.9 | 1673.9 | 1672.4 | 1674.8 | 1674.4 | -0.1% |
| Energy Consumption per Unit of Output<br>(thousand Btu per 1987 dollar of output) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Residual Oil  | 0.66   | 0.59   | 0.61   | 0.60   | 0.60   | 0.60   | 0.60   | 0.60   | 0.59   | 0.59   | 0.58   | 0.57   | 0.57   | 0.56   | 0.55   | 0.55   | 0.55   | 0.54   | 0.54   | 0.53   | 0.53   | 0.53   | -1.0% |
| Other Petroleum 2/  | 0.77   | 0.71   | 0.71   | 0.71   | 0.71   | 0.71   | 0.71   | 0.70   | 0.69   | 0.68   | 0.67   | 0.66   | 0.65   | 0.64   | 0.64   | 0.63   | 0.62   | 0.61   | 0.60   | 0.60   | 0.59   | 0.59   | -1.2% |
| Petroleum Subtotal  | 1.44   | 1.29   | 1.32   | 1.30   | 1.30   | 1.30   | 1.30   | 1.29   | 1.28   | 1.27   | 1.25   | 1.23   | 1.22   | 1.20   | 1.19   | 1.18   | 1.17   | 1.15   | 1.14   | 1.13   | 1.12   | 1.12   | -1.1% |
| Natural Gas   | 7.27   | 7.27   | 7.14   | 7.07   | 6.97   | 6.88   | 6.79   | 6.74   | 6.67   | 6.63   | 6.60   | 6.56   | 6.54   | 6.50   | 6.46   | 6.43   | 6.41   | 6.39   | 6.38   | 6.36   | 6.34   | 6.32   | -0.6% |
| Metallurgical Coal  | 11.68  | 11.47  | 11.03  | 10.72  | 10.27  | 9.89   | 9.58   | 9.44   | 9.17   | 8.97   | 8.85   | 8.63   | 8.52   | 8.30   | 8.10   | 7.91   | 7.74   | 7.61   | 7.49   | 7.33   | 7.16   | 7.02   | -2.3% |
| Net Coke Imports  | 1.32   | 1.44   | 1.65   | 1.79   | 1.99   | 2.16   | 2.31   | 2.38   | 2.50   | 2.59   | 2.66   | 2.75   | 2.82   | 2.91   | 3.01   | 3.10   | 3.18   | 3.24   | 3.31   | 3.39   | 3.47   | 3.55   | 4.6%  |
| Steam Coal  | 1.23   | 1.27   | 1.25   | 1.25   | 1.23   | 1.22   | 1.22   | 1.22   | 1.22   | 1.22   | 1.21   | 1.21   | 1.21   | 1.21   | 1.20   | 1.20   | 1.20   | 1.20   | 1.20   | 1.20   | 1.20   | 1.20   | -0.1% |
| Coal Subtotal   | 14.23  | 14.19  | 13.93  | 13.76  | 13.49  | 13.27  | 13.10  | 13.03  | 12.89  | 12.78  | 12.72  | 12.60  | 12.55  | 12.43  | 12.31  | 12.21  | 12.11  | 12.06  | 11.99  | 11.92  | 11.83  | 11.76  | -0.9% |
| Purchased Electricity   | 2.37   | 2.38   | 2.38   | 2.40   | 2.42   | 2.43   | 2.45   | 2.46   | 2.47   | 2.47   | 2.48   | 2.48   | 2.48   | 2.49   | 2.49   | 2.50   | 2.50   | 2.50   | 2.51   | 2.51   | 2.52   | 2.53   | 0.3%  |
| Total   | 25.31  | 25.12  | 24.78  | 24.53  | 24.18  | 23.89  | 23.65  | 23.52  | 23.31  | 23.15  | 23.05  | 22.88  | 22.78  | 22.62  | 22.46  | 22.32  | 22.19  | 22.11  | 22.02  | 21.93  | 21.82  | 21.74  | -0.7% |
| Carbon Emissions (bill. kg)   | 41.7   | 41.0   | 41.5   | 41.5   | 42.1   | 42.6   | 42.8   | 42.5   | 42.7   | 42.6   | 42.2   | 42.1   | 41.8   | 41.8   | 41.9   | 41.9   | 41.9   | 41.7   | 41.6   | 41.6   | 41.7   | 41.7   | 0.0%  |

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

Btu = British thermal unit.

Bill. = Billion.

N/A = Not applicable.

\$ = Dollars.

KG = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 31. Aluminum Industry Energy Consumption (1 of 1)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Industry Output (billion 1987 \$)   | 30.12 | 30.32 | 30.43 | 30.78 | 30.92 | 31.26 | 31.55 | 31.64 | 31.73 | 31.85 | 31.91 | 32.00 | 32.09 | 32.31 | 32.49 | 32.70 | 32.82 | 32.98 | 33.04 | 33.05 | 33.12 | 33.34 | 0.5%      |
| Energy Consumption (trillion Btu)   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Distillate Oil  | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.0%      |
| Liquefied Petroleum Gas   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1%      |
| Petroleum Coke  | 14.2  | 14.1  | 14.1  | 14.2  | 14.2  | 14.2  | 14.3  | 14.3  | 14.2  | 14.2  | 14.2  | 14.2  | 14.2  | 14.2  | 14.3  | 14.3  | 14.3  | 14.4  | 14.4  | 14.3  | 14.4  | 14.4  | 0.1%      |
| Other Petroleum   | 30.8  | 30.8  | 30.7  | 30.9  | 30.9  | 31.1  | 31.3  | 31.2  | 31.2  | 31.2  | 31.1  | 31.0  | 31.0  | 31.1  | 31.1  | 31.2  | 31.2  | 31.2  | 31.2  | 31.1  | 31.1  | 31.2  | 0.1%      |
| Petroleum Subtotal  | 45.2  | 45.0  | 45.0  | 45.2  | 45.2  | 45.5  | 45.7  | 45.6  | 45.5  | 45.5  | 45.4  | 45.4  | 45.3  | 45.4  | 45.5  | 45.6  | 45.6  | 45.7  | 45.7  | 45.6  | 45.6  | 45.8  | 0.1%      |
| Natural Gas   | 82.5  | 82.0  | 81.9  | 82.3  | 82.3  | 82.6  | 82.9  | 82.7  | 82.5  | 82.3  | 82.1  | 81.9  | 81.7  | 81.9  | 82.1  | 82.2  | 82.3  | 82.4  | 82.4  | 82.3  | 82.3  | 82.6  | 0.0%      |
| Purchased Electricity   | 215.7 | 215.3 | 215.3 | 217.1 | 217.5 | 219.4 | 220.8 | 220.8 | 220.9 | 221.2 | 221.1 | 221.2 | 221.3 | 222.3 | 223.1 | 224.0 | 224.6 | 225.3 | 225.5 | 225.3 | 225.6 | 226.8 | 0.2%      |
| Total   | 343.4 | 342.3 | 342.1 | 344.7 | 345.0 | 347.5 | 349.3 | 349.1 | 348.9 | 349.1 | 348.6 | 348.5 | 348.3 | 349.6 | 350.6 | 351.9 | 352.5 | 353.5 | 353.7 | 353.2 | 353.5 | 355.3 | 0.2%      |
| Energy Consumption per Unit of Output<br>(thousand Btu per 1987 dollar of output) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Distillate Oil  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -0.4%     |
| Liquefied Petroleum Gas   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | -0.4%     |
| Petroleum Coke  | 0.47  | 0.47  | 0.46  | 0.46  | 0.46  | 0.46  | 0.45  | 0.45  | 0.45  | 0.45  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.43  | 0.43  | 0.43  | 0.43  | -0.4%     |
| Other Petroleum   | 1.02  | 1.01  | 1.01  | 1.00  | 1.00  | 1.00  | 0.99  | 0.99  | 0.98  | 0.98  | 0.97  | 0.97  | 0.97  | 0.96  | 0.96  | 0.95  | 0.95  | 0.95  | 0.94  | 0.94  | 0.94  | 0.94  | -0.4%     |
| Petroleum Subtotal  | 1.50  | 1.48  | 1.48  | 1.47  | 1.46  | 1.46  | 1.45  | 1.44  | 1.44  | 1.43  | 1.42  | 1.42  | 1.41  | 1.41  | 1.40  | 1.40  | 1.39  | 1.39  | 1.38  | 1.38  | 1.38  | 1.37  | -0.4%     |
| Natural Gas   | 2.74  | 2.71  | 2.69  | 2.67  | 2.66  | 2.64  | 2.63  | 2.61  | 2.60  | 2.58  | 2.57  | 2.56  | 2.55  | 2.54  | 2.53  | 2.52  | 2.51  | 2.50  | 2.49  | 2.49  | 2.48  | 2.48  | -0.5%     |
| Purchased Electricity   | 7.16  | 7.10  | 7.07  | 7.05  | 7.04  | 7.02  | 7.00  | 6.98  | 6.96  | 6.95  | 6.93  | 6.91  | 6.90  | 6.88  | 6.87  | 6.85  | 6.84  | 6.83  | 6.83  | 6.82  | 6.81  | 6.80  | -0.2%     |
| Total   | 11.40 | 11.29 | 11.24 | 11.20 | 11.16 | 11.11 | 11.07 | 11.03 | 11.00 | 10.96 | 10.92 | 10.89 | 10.85 | 10.82 | 10.79 | 10.76 | 10.74 | 10.72 | 10.70 | 10.69 | 10.67 | 10.66 | -0.3%     |
| Carbon Emissions (bill. kg)   | 12.8  | 13.1  | 13.1  | 13.2  | 13.3  | 13.4  | 13.5  | 13.5  | 13.5  | 13.4  | 13.3  | 13.3  | 13.3  | 13.3  | 13.3  | 13.4  | 13.5  | 13.5  | 13.6  | 13.6  | 13.6  | 13.6  | 0.3%      |

1/ Fuel consumption includes consumption for cogeneration.

Btu = British thermal unit.

Bill. = Billion.

N/A = Not applicable.

\$ = Dollars.

KG = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 32. Other Industrial Sector Energy Consumption (1 of 2)  
(Trillion Btu)**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Agriculture</b>                    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Distillate Oil                        | 564.0  | 578.1  | 584.1  | 594.2  | 601.3  | 609.6  | 617.5  | 624.1  | 631.2  | 638.4  | 643.9  | 652.4  | 659.4  | 667.1  | 677.3  | 687.0  | 695.8  | 701.5  | 710.2  | 719.1  | 727.7  | 736.3  | 1.2%      |
| Liquid Petroleum Gas                  | 77.8   | 79.8   | 80.6   | 82.0   | 83.0   | 84.1   | 85.2   | 86.1   | 87.1   | 88.1   | 88.9   | 90.1   | 91.0   | 92.1   | 93.5   | 94.8   | 96.1   | 96.8   | 98.0   | 99.3   | 100.5  | 101.7  | 1.2%      |
| Motor Gasoline                        | 92.4   | 94.7   | 95.7   | 97.3   | 98.5   | 99.9   | 101.2  | 102.3  | 103.4  | 104.6  | 105.5  | 106.9  | 108.0  | 109.3  | 111.0  | 112.6  | 114.0  | 114.9  | 116.4  | 117.8  | 119.2  | 120.7  | 1.2%      |
| Other Petroleum                       | 16.4   | 16.9   | 17.0   | 17.3   | 17.5   | 17.8   | 18.0   | 18.2   | 18.4   | 18.6   | 18.8   | 19.0   | 19.2   | 19.4   | 19.7   | 20.0   | 20.3   | 20.4   | 20.7   | 20.9   | 21.2   | 21.4   | 1.2%      |
| Petroleum Subtotal                    | 750.7  | 769.4  | 777.4  | 790.8  | 800.3  | 811.4  | 821.9  | 830.7  | 840.1  | 849.8  | 857.1  | 868.3  | 877.7  | 888.0  | 901.5  | 914.4  | 926.2  | 933.7  | 945.3  | 957.2  | 968.7  | 980.1  | 1.2%      |
| Natural Gas                           | 48.9   | 50.1   | 50.6   | 51.5   | 52.1   | 52.9   | 53.6   | 54.1   | 54.8   | 55.4   | 55.9   | 56.6   | 57.2   | 57.9   | 58.8   | 59.6   | 60.4   | 60.9   | 61.7   | 62.5   | 63.2   | 64.0   | 1.2%      |
| Steam Coal                            | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5%      |
| Renewables                            | 19.4   | 19.9   | 20.1   | 20.5   | 20.7   | 21.0   | 21.3   | 21.6   | 21.8   | 22.1   | 22.3   | 22.6   | 22.8   | 23.1   | 23.4   | 23.8   | 24.1   | 24.3   | 24.6   | 24.9   | 25.2   | 25.5   | 1.2%      |
| Purchased Electricity                 | 134.5  | 137.9  | 139.3  | 141.7  | 143.4  | 145.4  | 147.3  | 148.8  | 150.5  | 152.2  | 153.5  | 155.5  | 157.2  | 159.1  | 161.5  | 163.8  | 165.9  | 167.2  | 169.3  | 171.4  | 173.5  | 175.5  | 1.2%      |
| <b>Total</b>                          | 954.0  | 977.8  | 988.0  | 1005.0 | 1017.1 | 1031.1 | 1044.6 | 1055.7 | 1067.7 | 1080.0 | 1089.2 | 1103.5 | 1115.5 | 1128.5 | 1145.7 | 1162.1 | 1177.1 | 1186.7 | 1201.4 | 1216.5 | 1231.1 | 1245.6 | 1.2%      |
| Industry Output (billion 1987 \$)     | 258.42 | 264.40 | 267.06 | 270.80 | 273.83 | 277.27 | 280.58 | 283.30 | 286.12 | 288.96 | 291.19 | 294.55 | 297.37 | 300.48 | 304.53 | 308.68 | 312.61 | 315.20 | 318.74 | 322.37 | 326.02 | 329.73 | 1.1%      |
| Energy Consumption per Unit of Output |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| (thous. Btu/1987 \$ of output)        | 3.69   | 3.70   | 3.70   | 3.71   | 3.71   | 3.72   | 3.72   | 3.73   | 3.73   | 3.74   | 3.74   | 3.75   | 3.75   | 3.76   | 3.76   | 3.76   | 3.77   | 3.76   | 3.77   | 3.77   | 3.78   | 3.78   | 0.1%      |
| Carbon Emissions (bill. Kg.)          | 22.0   | 22.8   | 23.0   | 23.4   | 23.7   | 24.1   | 24.4   | 24.6   | 24.9   | 25.1   | 25.3   | 25.6   | 25.9   | 26.1   | 26.5   | 26.9   | 27.4   | 27.6   | 27.9   | 28.3   | 28.6   | 28.9   | 1.3%      |
| <b>Construction</b>                   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Distillate Oil                        | 191.8  | 199.0  | 201.0  | 205.7  | 209.7  | 215.5  | 221.2  | 225.1  | 228.4  | 231.0  | 232.8  | 235.7  | 237.3  | 240.6  | 244.8  | 251.0  | 256.9  | 259.1  | 261.5  | 265.0  | 269.9  | 273.8  | 1.6%      |
| Motor Gasoline                        | 118.0  | 122.4  | 123.6  | 126.5  | 129.0  | 132.5  | 136.0  | 138.4  | 140.5  | 142.1  | 143.2  | 145.0  | 145.9  | 148.0  | 150.6  | 154.4  | 158.0  | 159.4  | 160.9  | 163.0  | 166.0  | 168.4  | 1.6%      |
| Asphalt and Road Oil                  | 1314.0 | 1360.2 | 1372.5 | 1403.3 | 1429.8 | 1468.5 | 1507.0 | 1533.8 | 1556.8 | 1574.9 | 1587.3 | 1607.9 | 1618.9 | 1641.9 | 1670.6 | 1712.8 | 1753.3 | 1769.6 | 1786.9 | 1811.3 | 1844.7 | 1873.3 | 1.6%      |
| Petroleum Subtotal                    | 1623.9 | 1681.6 | 1697.2 | 1735.5 | 1768.6 | 1816.5 | 1864.2 | 1897.3 | 1925.8 | 1948.1 | 1963.2 | 1988.6 | 2002.1 | 2030.5 | 2066.1 | 2118.2 | 2168.2 | 2188.1 | 2209.3 | 2239.3 | 2280.6 | 2315.6 | 1.6%      |
| Natural Gas                           | 191.4  | 198.6  | 200.6  | 205.3  | 209.2  | 215.0  | 220.7  | 224.6  | 227.9  | 230.5  | 232.2  | 235.2  | 236.7  | 240.1  | 244.3  | 250.4  | 256.3  | 258.5  | 260.9  | 264.4  | 269.2  | 273.2  | 1.6%      |
| Steam Coal                            | 144.0  | 149.4  | 150.9  | 154.4  | 157.4  | 161.7  | 166.0  | 169.0  | 171.5  | 173.4  | 174.7  | 176.9  | 178.1  | 180.6  | 183.8  | 188.4  | 192.8  | 194.5  | 196.3  | 198.9  | 202.6  | 205.5  | 1.6%      |
| Purchased Electricity                 | 124.5  | 129.2  | 130.5  | 133.5  | 136.1  | 139.9  | 143.6  | 146.1  | 148.3  | 150.0  | 151.1  | 153.0  | 154.0  | 156.2  | 158.9  | 162.9  | 166.7  | 168.2  | 169.7  | 172.0  | 175.1  | 177.7  | 1.6%      |
| <b>Total</b>                          | 2083.8 | 2158.8 | 2179.1 | 2228.7 | 2271.3 | 2333.0 | 2394.5 | 2436.9 | 2473.4 | 2502.0 | 2521.3 | 2553.7 | 2570.9 | 2607.3 | 2653.0 | 2720.0 | 2784.1 | 2809.4 | 2836.2 | 2874.7 | 2927.5 | 2972.0 | 1.6%      |
| Industry Output (billion 1987 \$)     | 439.53 | 456.87 | 461.88 | 473.27 | 483.01 | 496.95 | 510.78 | 520.31 | 528.48 | 534.83 | 539.15 | 546.37 | 550.20 | 558.35 | 568.54 | 583.49 | 597.73 | 603.24 | 609.13 | 617.62 | 629.25 | 638.86 | 1.7%      |
| Energy Consumption per Unit of Output |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| (thous. Btu/1987 \$ of output)        | 4.74   | 4.73   | 4.72   | 4.71   | 4.70   | 4.69   | 4.69   | 4.68   | 4.68   | 4.68   | 4.68   | 4.67   | 4.67   | 4.67   | 4.67   | 4.66   | 4.66   | 4.66   | 4.66   | 4.65   | 4.65   | 4.65   | -0.1%     |
| Carbon Emissions (bill. Kg.)          | 18.7   | 19.6   | 19.8   | 20.2   | 20.7   | 21.3   | 21.8   | 22.2   | 22.5   | 22.7   | 22.9   | 23.1   | 23.2   | 23.5   | 24.0   | 24.6   | 25.2   | 25.4   | 25.7   | 26.0   | 26.5   | 26.8   | 1.7%      |
| <b>Mining</b>                         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residual Oil                          | 25.3   | 25.3   | 25.4   | 25.8   | 26.2   | 26.5   | 26.8   | 27.0   | 27.3   | 27.4   | 27.5   | 27.7   | 27.7   | 27.9   | 28.1   | 28.4   | 28.6   | 28.7   | 28.8   | 29.0   | 29.1   | 29.3   | 0.7%      |
| Distillate Oil                        | 174.4  | 174.1  | 175.2  | 177.4  | 180.4  | 182.8  | 184.7  | 186.2  | 187.7  | 189.0  | 189.5  | 190.5  | 191.1  | 192.1  | 193.6  | 195.4  | 197.2  | 197.6  | 198.8  | 199.7  | 200.8  | 201.9  | 0.7%      |
| Motor Gasoline                        | 14.3   | 14.1   | 14.0   | 14.0   | 14.1   | 14.2   | 14.3   | 14.5   | 14.7   | 14.9   | 14.9   | 15.1   | 15.3   | 15.4   | 15.6   | 15.8   | 16.0   | 16.1   | 16.3   | 16.4   | 16.5   | 16.6   | 0.7%      |
| Other Petroleum                       | 7.9    | 7.7    | 7.5    | 7.5    | 7.5    | 7.5    | 7.6    | 7.8    | 7.9    | 8.0    | 8.0    | 8.2    | 8.3    | 8.4    | 8.5    | 8.7    | 8.8    | 8.9    | 9.0    | 9.1    | 9.1    | 9.2    | 0.7%      |
| Petroleum Subtotal                    | 221.9  | 221.2  | 222.2  | 224.6  | 228.2  | 231.0  | 233.5  | 235.5  | 237.5  | 239.3  | 240.0  | 241.5  | 242.4  | 243.8  | 245.8  | 248.2  | 250.6  | 251.3  | 252.9  | 254.1  | 255.5  | 256.9  | 0.7%      |
| Natural Gas                           | 357.3  | 350.9  | 343.0  | 340.4  | 342.0  | 343.0  | 347.4  | 352.6  | 358.3  | 362.8  | 365.5  | 372.2  | 376.8  | 381.4  | 386.6  | 392.7  | 399.6  | 403.3  | 407.5  | 410.8  | 413.1  | 414.8  | 0.7%      |
| Lease and Plant Fuel                  | 1275.5 | 1277.4 | 1256.0 | 1253.4 | 1267.8 | 1275.8 | 1298.8 | 1332.7 | 1370.9 | 1402.9 | 1424.7 | 1466.7 | 1494.4 | 1520.3 | 1546.9 | 1577.9 | 1613.9 | 1632.5 | 1654.8 | 1676.2 | 1694.9 | 1712.7 | 1.3%      |
| Steam Coal                            | 93.2   | 94.5   | 95.5   | 96.9   | 98.7   | 100.0  | 101.0  | 101.6  | 102.1  | 102.6  | 102.8  | 103.1  | 102.9  | 103.3  | 103.9  | 104.7  | 105.1  | 104.7  | 105.0  | 105.3  | 105.7  | 106.1  | 0.6%      |
| Renewables                            | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.2    | 1.2    | 1.2    | 1.2    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 0.7%      |
| Purchased Electricity                 | 293.3  | 291.4  | 290.9  | 293.2  | 297.5  | 300.8  | 304.5  | 307.6  | 310.9  | 313.6  | 314.9  | 317.9  | 319.5  | 321.9  | 325.2  | 329.0  | 332.7  | 333.7  | 336.0  | 337.8  | 339.8  | 341.5  | 0.7%      |
| <b>Total</b>                          | 2242.3 | 2236.5 | 2208.7 | 2209.6 | 2235.1 | 2251.6 | 2286.2 | 2331.1 | 2380.9 | 2422.4 | 2449.1 | 2502.6 | 2537.1 | 2571.8 | 2609.7 | 2653.7 | 2703.2 | 2726.8 | 2757.5 | 2785.4 | 2810.2 | 2833.4 | 1.1%      |

**Table 32. Other Industrial Sector Energy Consumption (2 of 2)  
(Trillion Btu)**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Industry Output (billion 1987 \$)       | 137.15 | 136.14 | 135.30 | 135.81 | 137.50 | 138.83 | 140.57 | 142.29 | 144.08 | 145.56 | 146.38 | 148.13 | 149.34 | 150.72 | 152.43 | 154.40 | 156.59 | 157.58 | 158.97 | 160.05 | 161.03 | 161.91 | 0.8%      |
| Energy Consumption per Unit of Output   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| (thous. Btu/1987 \$ of output)          | 16.35  | 16.43  | 16.32  | 16.27  | 16.26  | 16.22  | 16.26  | 16.38  | 16.53  | 16.64  | 16.73  | 16.89  | 16.99  | 17.06  | 17.12  | 17.19  | 17.26  | 17.30  | 17.35  | 17.40  | 17.45  | 17.50  | 0.3%      |
| Carbon Emissions (bill. Kg.)            | 26.5   | 26.8   | 26.8   | 27.0   | 27.4   | 27.7   | 28.0   | 28.3   | 28.6   | 28.7   | 28.8   | 29.0   | 29.1   | 29.3   | 29.6   | 30.0   | 30.4   | 30.5   | 30.8   | 31.0   | 31.1   | 31.2   | 0.7%      |
| <b>Metal-Based Durables Consumption</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residual Oil                            | 30.2   | 28.9   | 31.3   | 33.0   | 34.9   | 36.4   | 38.1   | 39.7   | 41.5   | 43.0   | 44.2   | 45.6   | 46.6   | 47.9   | 49.5   | 51.1   | 52.8   | 53.9   | 55.2   | 56.4   | 57.6   | 58.2   | 3.0%      |
| Distillate Oil                          | 21.6   | 19.7   | 21.0   | 22.1   | 23.4   | 24.4   | 25.5   | 26.6   | 27.7   | 28.7   | 29.3   | 30.2   | 30.8   | 31.7   | 32.6   | 33.7   | 34.7   | 35.4   | 36.2   | 36.9   | 37.7   | 38.4   | 2.7%      |
| Liquid Petroleum Gas                    | 4.2    | 3.9    | 4.1    | 4.2    | 4.5    | 4.7    | 4.9    | 5.2    | 5.4    | 5.6    | 5.7    | 5.8    | 6.0    | 6.1    | 6.3    | 6.5    | 6.7    | 6.8    | 7.0    | 7.1    | 7.2    | 7.3    | 2.5%      |
| Other Petroleum                         | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A       |
| Petroleum Subtotal                      | 56.0   | 52.4   | 56.4   | 59.4   | 62.8   | 65.4   | 68.6   | 71.4   | 74.6   | 77.3   | 79.2   | 81.6   | 83.4   | 85.6   | 88.4   | 91.4   | 94.2   | 96.0   | 98.4   | 100.4  | 102.5  | 103.8  | 2.8%      |
| Natural Gas                             | 781.9  | 809.7  | 824.9  | 859.3  | 899.2  | 925.8  | 954.5  | 979.3  | 1008.7 | 1037.5 | 1060.4 | 1087.8 | 1108.8 | 1134.7 | 1167.3 | 1199.5 | 1232.2 | 1250.6 | 1275.8 | 1300.4 | 1324.8 | 1348.5 | 2.5%      |
| Steam Coal                              | 83.0   | 83.1   | 83.2   | 83.3   | 83.4   | 83.4   | 83.5   | 83.6   | 83.7   | 83.8   | 83.9   | 84.0   | 84.1   | 84.2   | 84.3   | 84.4   | 84.3   | 84.3   | 84.4   | 84.5   | 84.6   | 84.6   | 0.1%      |
| Renewables                              | 0.9    | 0.9    | 1.0    | 1.0    | 1.0    | 1.1    | 1.1    | 1.1    | 1.2    | 1.2    | 1.2    | 1.2    | 1.3    | 1.3    | 1.3    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.5    | 1.5    | 2.3%      |
| Purchased Electricity                   | 604.9  | 625.2  | 639.5  | 667.4  | 698.9  | 721.2  | 746.0  | 766.5  | 790.7  | 813.8  | 832.4  | 852.8  | 870.5  | 891.2  | 916.2  | 940.7  | 965.6  | 981.0  | 1000.9 | 1020.9 | 1041.4 | 1061.2 | 2.6%      |
| Total                                   | 1526.8 | 1571.4 | 1604.9 | 1670.4 | 1745.4 | 1796.9 | 1853.7 | 1902.0 | 1958.8 | 2013.6 | 2057.1 | 2107.3 | 2147.9 | 2196.9 | 2257.4 | 2317.1 | 2377.5 | 2413.4 | 2460.9 | 2507.6 | 2554.8 | 2599.7 | 2.4%      |
| Industry Output (billion 1987 \$)       | 1463.4 | 1520.8 | 1562.6 | 1637.8 | 1721.0 | 1779.9 | 1844.1 | 1900.4 | 1966.1 | 2030.0 | 2081.6 | 2140.7 | 2190.0 | 2248.7 | 2319.6 | 2389.3 | 2460.3 | 2505.0 | 2562.9 | 2620.3 | 2677.8 | 2733.0 | 2.9%      |
| Energy Consumption per Unit of Output   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| (thous. Btu/1987 \$ of output)          | 1.04   | 1.03   | 1.03   | 1.02   | 1.01   | 1.01   | 1.01   | 1.00   | 1.00   | 0.99   | 0.99   | 0.98   | 0.98   | 0.98   | 0.97   | 0.97   | 0.97   | 0.96   | 0.96   | 0.96   | 0.95   | 0.95   | -0.4%     |
| Carbon Emissions (bill. Kg.)            | 44.6   | 47.0   | 48.2   | 50.1   | 52.6   | 54.3   | 56.0   | 57.4   | 59.1   | 60.6   | 61.7   | 63.0   | 64.1   | 65.4   | 67.2   | 69.0   | 71.2   | 72.2   | 73.8   | 75.2   | 76.6   | 77.9   | 2.6%      |
| <b>Other Manufacturing Consumption</b>  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residual Oil                            | 46.7   | 42.0   | 43.9   | 44.3   | 45.2   | 46.1   | 47.1   | 47.9   | 48.8   | 49.4   | 49.6   | 50.1   | 50.4   | 50.9   | 51.5   | 52.3   | 52.9   | 53.2   | 53.7   | 54.1   | 54.7   | 55.3   | 0.8%      |
| Distillate Oil                          | 57.1   | 48.3   | 50.0   | 51.0   | 52.3   | 53.7   | 55.2   | 56.3   | 57.4   | 58.3   | 58.0   | 59.0   | 59.6   | 60.4   | 61.3   | 62.4   | 63.2   | 63.7   | 64.4   | 64.9   | 65.5   | 66.4   | 0.7%      |
| Liquid Petroleum Gas                    | 16.6   | 15.4   | 16.0   | 16.3   | 16.7   | 17.1   | 17.7   | 18.2   | 18.6   | 18.9   | 18.9   | 19.2   | 19.4   | 19.5   | 19.9   | 20.3   | 20.6   | 20.8   | 21.0   | 21.2   | 21.4   | 21.7   | 1.2%      |
| Petroleum Subtotal                      | 120.3  | 105.7  | 109.9  | 111.6  | 114.2  | 116.9  | 120.0  | 122.5  | 124.7  | 126.6  | 126.6  | 128.3  | 129.4  | 130.7  | 132.8  | 135.1  | 136.7  | 137.6  | 139.1  | 140.2  | 141.6  | 143.4  | 0.8%      |
| Natural Gas                             | 1667.8 | 1713.0 | 1716.7 | 1738.2 | 1769.4 | 1791.9 | 1812.2 | 1821.2 | 1835.2 | 1849.9 | 1858.7 | 1880.3 | 1888.4 | 1905.4 | 1933.1 | 1963.0 | 1987.9 | 1996.6 | 2015.5 | 2036.1 | 2057.0 | 2079.1 | 1.0%      |
| Steam Coal                              | 154.9  | 156.5  | 156.6  | 157.6  | 159.2  | 160.3  | 161.3  | 161.7  | 162.3  | 162.9  | 163.1  | 164.0  | 164.2  | 164.8  | 165.9  | 167.1  | 168.0  | 168.1  | 168.8  | 169.5  | 170.2  | 171.0  | 0.5%      |
| Renewables                              | 303.9  | 311.9  | 313.9  | 318.7  | 325.3  | 330.4  | 335.5  | 338.2  | 341.8  | 345.5  | 347.7  | 352.4  | 354.8  | 358.8  | 364.8  | 371.1  | 376.5  | 378.9  | 383.2  | 387.8  | 392.6  | 397.6  | 1.2%      |
| Purchased Electricity                   | 746.3  | 765.0  | 768.3  | 779.5  | 794.9  | 807.3  | 820.3  | 826.7  | 835.0  | 843.4  | 848.9  | 858.4  | 864.4  | 873.5  | 886.7  | 900.4  | 911.9  | 917.3  | 926.6  | 936.5  | 947.7  | 959.5  | 1.1%      |
| Total                                   | 2993.3 | 3052.0 | 3065.3 | 3105.6 | 3162.9 | 3206.8 | 3249.3 | 3270.2 | 3299.1 | 3328.3 | 3345.1 | 3383.3 | 3401.3 | 3433.2 | 3483.3 | 3536.6 | 3580.9 | 3598.5 | 3633.2 | 3670.1 | 3709.2 | 3750.7 | 1.0%      |
| Industry Output (billion 1987 \$)       | 871.2  | 891.0  | 896.4  | 909.7  | 927.8  | 942.0  | 955.8  | 963.2  | 973.0  | 982.9  | 989.1  | 1001.7 | 1008.1 | 1018.9 | 1035.2 | 1052.4 | 1067.0 | 1073.5 | 1085.1 | 1097.4 | 1110.5 | 1124.4 | 1.2%      |
| Energy Consumption per Unit of Output   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| (thous. Btu/1987 \$ of output)          | 3.44   | 3.43   | 3.42   | 3.41   | 3.41   | 3.40   | 3.40   | 3.40   | 3.39   | 3.39   | 3.38   | 3.38   | 3.37   | 3.37   | 3.36   | 3.36   | 3.36   | 3.35   | 3.35   | 3.34   | 3.34   | 3.34   | -0.1%     |
| Carbon Emissions (bill. Kg.)            | 67.5   | 70.1   | 70.6   | 71.5   | 73.0   | 74.2   | 75.1   | 75.6   | 76.3   | 76.8   | 76.9   | 77.6   | 77.9   | 78.5   | 79.7   | 80.9   | 82.3   | 82.6   | 83.6   | 84.4   | 85.3   | 86.1   | 1.1%      |

Note: Totals may not equal sum of components due to independent rounding. Data for 1998 are model results and may differ slightly from official EIA data reports.

Bill. = Billion.

Thous. = Thousand.

\$ = Dollar.

KG = Kilograms.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 33. Transportation Sector Energy Use by Mode and Type (Trillion Btu) (1 of 2)**

1998-

|                               | 1998           | 2000           | 2001           | 2002           | 2003           | 2004           | 2005           | 2006           | 2007           | 2008           | 2009           | 2010           | 2011           | 2012           | 2013           | 2014           | 2015           | 2016           | 2017           | 2018           | 2019           | 2020           | 2020        |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|
| <b>Energy Use by Mode</b>     |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |             |
| <b>Highway</b>                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |             |
| Light-Duty Vehicles           | 14641          | 15288          | 15666          | 16010          | 16279          | 16641          | 16966          | 17303          | 17632          | 17928          | 18234          | 18537          | 18795          | 19034          | 19299          | 19590          | 19867          | 20103          | 20324          | 20556          | 20781          | 21027          | 1.7%        |
| Automobiles                   | 7156           | 7023           | 7007           | 6969           | 6892           | 6861           | 6813           | 6780           | 6753           | 6718           | 6694           | 6682           | 6649           | 6623           | 6621           | 6627           | 6645           | 6665           | 6682           | 6711           | 6739           | 6785           | -0.2%       |
| Light Trucks                  | 7462           | 8243           | 8636           | 9019           | 9365           | 9757           | 10131          | 10501          | 10857          | 11189          | 11519          | 11834          | 12125          | 12389          | 12656          | 12942          | 13201          | 13417          | 13621          | 13825          | 14021          | 14221          | 3.0%        |
| Motorcycles                   | 22.8           | 22.4           | 22.3           | 22.1           | 21.9           | 21.8           | 21.6           | 21.5           | 21.4           | 21.2           | 21.1           | 21.1           | 21.0           | 20.9           | 20.8           | 20.9           | 20.9           | 20.9           | 21.0           | 21.0           | 21.1           | 21.2           | -0.3%       |
| Commercial Light Trucks 1/    | 612.8          | 623.5          | 631.4          | 642.3          | 652.3          | 662.8          | 673.1          | 681.6          | 690.2          | 698.5          | 705.6          | 714.0          | 720.0          | 727.5          | 736.7          | 747.2          | 757.4          | 762.9          | 769.7          | 777.1          | 785.2          | 793.2          | 1.2%        |
| Buses                         | 151.5          | 152.3          | 152.8          | 153.2          | 153.5          | 154.1          | 154.4          | 154.7          | 155.0          | 155.1          | 155.2          | 155.1          | 154.9          | 154.7          | 154.4          | 154.2          | 153.9          | 153.7          | 153.3          | 152.9          | 152.5          | 152.0          | 0.0%        |
| Transit                       | 73.0           | 73.3           | 73.6           | 73.8           | 73.9           | 74.2           | 74.4           | 74.5           | 74.6           | 74.7           | 74.7           | 74.7           | 74.6           | 74.5           | 74.3           | 74.2           | 74.1           | 74.0           | 73.8           | 73.6           | 73.4           | 73.2           | 0.0%        |
| Intercity                     | 19.8           | 19.9           | 20.0           | 20.0           | 20.1           | 20.2           | 20.2           | 20.2           | 20.3           | 20.3           | 20.3           | 20.3           | 20.3           | 20.2           | 20.2           | 20.2           | 20.1           | 20.1           | 20.1           | 20.0           | 19.9           | 19.9           | 0.0%        |
| School                        | 58.7           | 59.0           | 59.2           | 59.4           | 59.5           | 59.7           | 59.9           | 60.0           | 60.1           | 60.1           | 60.1           | 60.1           | 60.0           | 59.9           | 59.8           | 59.7           | 59.7           | 59.6           | 59.4           | 59.3           | 59.1           | 58.9           | 0.0%        |
| Freight Trucks 2/             | 4139.9         | 4283.3         | 4339.0         | 4414.2         | 4493.8         | 4562.5         | 4627.5         | 4668.0         | 4709.6         | 4744.4         | 4759.0         | 4789.9         | 4797.9         | 4821.5         | 4858.7         | 4901.2         | 4939.7         | 4948.4         | 4969.4         | 4988.1         | 5006.9         | 5025.9         | 0.9%        |
| Medium (1000-26000 pounds)    | 856.6          | 826.3          | 816.0          | 810.1          | 808.4          | 803.5          | 800.5          | 799.2          | 799.9          | 802.2          | 803.4          | 806.8          | 808.0          | 812.0          | 818.9          | 828.8          | 834.9          | 838.2          | 844.6          | 851.4          | 858.8          | 866.4          | 0.1%        |
| Large (> 26000 pounds)        | 3283.3         | 3457.1         | 3522.9         | 3604.0         | 3685.4         | 3759.0         | 3827.0         | 3868.8         | 3909.7         | 3942.2         | 3955.6         | 3983.1         | 3989.9         | 4009.5         | 4039.8         | 4074.3         | 4104.8         | 4110.1         | 4124.8         | 4136.6         | 4148.1         | 4159.4         | 1.1%        |
| <b>Non-Highway</b>            |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |             |
| Air 3/                        | 3090.2         | 3294.9         | 3401.9         | 3520.1         | 3662.6         | 3812.9         | 3946.9         | 4100.9         | 4226.4         | 4372.8         | 4499.4         | 4656.6         | 4770.1         | 4914.0         | 5054.6         | 5231.5         | 5386.1         | 5540.1         | 5674.8         | 5836.7         | 5980.1         | 6124.8         | 3.2%        |
| General Aviation              | 181.0          | 190.0          | 194.8          | 200.1          | 206.5          | 213.3          | 219.3          | 226.3          | 231.9          | 238.5          | 244.3          | 251.4          | 256.5          | 263.0          | 269.4          | 277.4          | 284.4          | 291.4          | 297.5          | 304.8          | 311.3          | 317.9          | 2.6%        |
| Domestic Air Carriers         | 1760.4         | 1843.5         | 1889.9         | 1929.4         | 2000.1         | 2052.4         | 2101.4         | 2143.5         | 2185.3         | 2226.9         | 2266.5         | 2311.4         | 2344.2         | 2383.0         | 2429.1         | 2481.7         | 2533.8         | 2574.7         | 2617.5         | 2662.9         | 2712.0         | 2762.2         | 2.1%        |
| International Air Carriers    | 728.7          | 798.8          | 819.6          | 855.5          | 876.2          | 919.5          | 943.2          | 996.9          | 1018.6         | 1060.4         | 1081.1         | 1125.9         | 1144.4         | 1187.5         | 1213.2         | 1265.6         | 1294.3         | 1340.2         | 1363.0         | 1412.5         | 1439.1         | 1466.4         | 3.2%        |
| Freight Carriers              | 420.2          | 462.6          | 497.6          | 535.1          | 579.7          | 627.7          | 682.9          | 734.2          | 790.6          | 846.9          | 907.6          | 967.9          | 1025.0         | 1080.5         | 1142.9         | 1206.8         | 1273.5         | 1333.8         | 1396.8         | 1456.4         | 1517.7         | 1578.2         | 6.2%        |
| Water 4/                      | 1161.4         | 1205.3         | 1224.7         | 1247.2         | 1274.4         | 1304.4         | 1336.5         | 1366.5         | 1396.7         | 1427.6         | 1457.9         | 1490.9         | 1519.4         | 1547.4         | 1578.4         | 1612.0         | 1646.2         | 1674.4         | 1703.2         | 1733.3         | 1764.4         | 1796.5         | 2.0%        |
| Freight                       | 910.5          | 951.0          | 968.6          | 989.2          | 1014.4         | 1042.1         | 1072.1         | 1100.0         | 1128.2         | 1157.0         | 1185.4         | 1216.3         | 1243.1         | 1269.2         | 1298.1         | 1329.4         | 1361.4         | 1387.6         | 1414.6         | 1442.6         | 1471.6         | 1501.6         | 2.3%        |
| Domestic Shipping             | 283.8          | 282.5          | 279.5          | 278.5          | 279.0          | 278.8          | 279.3          | 279.1          | 279.1          | 278.7          | 277.2          | 277.1          | 275.8          | 275.2          | 275.3          | 275.8          | 276.3          | 274.8          | 274.1          | 273.0          | 272.0          | 270.8          | -0.2%       |
| International Shipping        | 626.7          | 668.5          | 689.1          | 710.7          | 735.4          | 763.2          | 792.8          | 820.9          | 849.1          | 878.3          | 908.2          | 939.2          | 967.2          | 994.0          | 1022.8         | 1053.6         | 1085.1         | 1112.7         | 1140.5         | 1169.5         | 1199.6         | 1230.8         | 3.1%        |
| Recreational Boats            | 250.9          | 254.2          | 256.2          | 258.1          | 260.0          | 262.3          | 264.4          | 266.5          | 268.5          | 270.5          | 272.5          | 274.6          | 276.4          | 278.2          | 280.3          | 282.6          | 284.9          | 286.8          | 288.7          | 290.7          | 292.8          | 294.9          | 0.7%        |
| Rail                          | 558.2          | 568.0          | 575.3          | 581.3          | 585.0          | 591.2          | 595.0          | 601.0          | 603.9          | 607.0          | 604.8          | 609.2          | 613.6          | 614.8          | 617.6          | 620.1          | 623.7          | 627.0          | 629.7          | 632.0          | 634.3          | 636.8          | 0.6%        |
| Freight                       | 456.2          | 462.1          | 467.4          | 471.4          | 473.1          | 477.2          | 479.1          | 483.2          | 484.2          | 485.3          | 481.1          | 483.5          | 486.0          | 485.3          | 486.1          | 486.6          | 488.2          | 489.5          | 490.3          | 490.5          | 490.7          | 491.0          | 0.3%        |
| Passenger                     | 102.0          | 105.8          | 107.9          | 109.9          | 112.0          | 114.0          | 115.9          | 117.8          | 119.7          | 121.7          | 123.7          | 125.7          | 127.6          | 129.5          | 131.5          | 133.5          | 135.6          | 137.5          | 139.5          | 141.5          | 143.6          | 145.8          | 1.6%        |
| Intercity                     | 19.3           | 20.1           | 20.5           | 20.9           | 21.2           | 21.6           | 22.0           | 22.3           | 22.7           | 23.1           | 23.5           | 23.8           | 24.2           | 24.6           | 24.9           | 25.3           | 25.7           | 26.1           | 26.5           | 26.8           | 27.2           | 27.7           | 1.6%        |
| Transit                       | 44.5           | 46.1           | 47.0           | 47.9           | 48.8           | 49.7           | 50.5           | 51.3           | 52.2           | 53.0           | 53.9           | 54.8           | 55.6           | 56.4           | 57.3           | 58.2           | 59.1           | 59.9           | 60.8           | 61.7           | 62.6           | 63.5           | 1.6%        |
| Commuter                      | 38.2           | 39.6           | 40.4           | 41.2           | 41.9           | 42.7           | 43.4           | 44.1           | 44.8           | 45.6           | 46.3           | 47.1           | 47.8           | 48.5           | 49.3           | 50.0           | 50.8           | 51.5           | 52.2           | 53.0           | 53.8           | 54.6           | 1.6%        |
| Lubricants                    | 258.6          | 267.9          | 270.9          | 273.1          | 275.0          | 278.2          | 282.9          | 287.0          | 290.6          | 293.4          | 295.2          | 297.7          | 299.4          | 301.7          | 305.0          | 309.2          | 313.7          | 316.8          | 319.7          | 321.9          | 323.7          | 325.9          | 1.1%        |
| Pipeline Fuel Natural Gas     | 751.5          | 770.7          | 747.6          | 745.8          | 751.9          | 754.4          | 767.8          | 788.9          | 812.6          | 830.0          | 840.6          | 866.4          | 881.3          | 895.2          | 909.5          | 927.4          | 948.1          | 957.4          | 968.5          | 977.6          | 983.3          | 987.9          | 1.3%        |
| Military Use                  | 521.3          | 528.5          | 524.1          | 521.6          | 518.3          | 516.7          | 520.0          | 525.4          | 530.2          | 535.2          | 539.8          | 542.2          | 542.9          | 544.4          | 545.9          | 547.4          | 548.9          | 550.5          | 552.1          | 553.7          | 555.3          | 556.9          | 0.3%        |
| Aviation                      | 455.0          | 460.7          | 456.9          | 454.7          | 451.8          | 450.4          | 453.3          | 458.0          | 462.2          | 466.6          | 470.5          | 472.7          | 473.3          | 474.5          | 475.8          | 477.2          | 478.5          | 479.9          | 481.3          | 482.7          | 484.1          | 485.5          | 0.3%        |
| Residual Fuel Use             | 7.8            | 8.2            | 8.1            | 8.1            | 8.0            | 8.0            | 8.1            | 8.2            | 8.2            | 8.3            | 8.4            | 8.4            | 8.4            | 8.5            | 8.5            | 8.5            | 8.5            | 8.5            | 8.6            | 8.6            | 8.6            | 8.6            | 0.5%        |
| Distillate Fuel Use           | 58.5           | 59.6           | 59.1           | 58.8           | 58.4           | 58.3           | 58.6           | 59.2           | 59.8           | 60.3           | 60.9           | 61.1           | 61.2           | 61.4           | 61.5           | 61.7           | 61.9           | 62.1           | 62.2           | 62.4           | 62.6           | 62.8           | 0.3%        |
| <b>Total</b>                  | <b>25886.2</b> | <b>26982.4</b> | <b>27533.9</b> | <b>28108.9</b> | <b>28645.8</b> | <b>29277.7</b> | <b>29870.3</b> | <b>30476.8</b> | <b>31046.9</b> | <b>31592.2</b> | <b>32091.3</b> | <b>32658.7</b> | <b>33094.6</b> | <b>33554.8</b> | <b>34059.3</b> | <b>34640.1</b> | <b>35184.8</b> | <b>35633.6</b> | <b>36064.4</b> | <b>36529.7</b> | <b>36967.2</b> | <b>37427.1</b> | <b>1.7%</b> |
| <b>Energy Use by Type</b>     |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |             |
| Motor Gasoline                | 15589.0        | 16173.4        | 16512.1        | 16817.6        | 17043.8        | 17369.0        | 17654.3        | 17958.5        | 18258.4        | 18523.3        | 18792.9        | 19059.5        | 19278.6        | 19479.8        | 19708.5        | 19964.9        | 20208.7        | 20409.1        | 20600.5        | 20805.8        | 21007.6        | 21231.9        | 1.4%        |
| Distillate (diesel)           | 4946.0         | 5117.7         | 5185.3         | 5273.7         | 5364.5         | 5448.6         | 5530.2         | 5582.6         | 5634.7         | 5682.2         | 5706.5         | 5757.3         | 5786.8         | 5830.3         | 5890.8         | 5958.1         | 6023.0         | 6056.3         | 6100.8         | 6142.2         | 6183.1         | 6224.0         | 1.1%        |
| Jet Fuel (kerosene & naphtha) | 3357.0         | 3557.8         | 3650.0         | 3766.4         | 3893.2         | 4041.0         | 4171.5         | 4322.9         | 4446.7         | 4590.4         | 4715.0         | 4866.9         | 4975.5         | 5113.9         | 5249.1         | 5418.9         | 5567.4         | 5715.5         | 5845.1         | 6000.6         | 6138.7         | 6277.8         | 2.9%        |
| Residual Oil                  | 650.0          | 689.4          | 706.7          | 725.7          | 747.8          | 772.5          | 799.0          | 824.1          | 849.3          | 875.3          | 901.5          | 929.2          | 953.8          | 977.4          | 1003.2         | 1030.8         | 1059.0         | 1083.2         | 1107.7         | 1133.3         | 1159.8         | 1187.3         | 2.8%        |
| Aviation Gasoline             | 42.8           | 42.6           | 42.5           | 42.4           | 42.3           | 42.3           | 42.3           | 42.2           | 42.2           | 42.2           | 42.1           | 42.1           | 42.1           | 42.1           | 42.1           | 42.1           | 42.1           | 42.1           | 42.1           | 42.1           | 42.1           | 42.1           | -0.1%       |
| Liquid Petroleum Gas          | 45.1           | 54.3           | 61.6           | 68.5           | 74.8           | 80.8           | 86.3           | 91.1           | 95.1           | 99.2           | 103.1          | 106.9          | 110.3          | 113.4          | 116.7          | 119.9          | 123.0          | 125.4          | 127.6          | 129.6          | 131.3          | 132.8          | 5.0%        |
| Lubricants                    | 258.6          | 267.9          | 270.9          | 273.1          | 275.0          | 278.2          | 282.9          | 287.0          | 290.6          | 293.4          | 295.2          | 297.7          | 299.4          | 301.7          | 305.0          | 309.2          | 313.7          | 316.8          | 319.7          | 321.9          | 323.7          | 325.9          | 1.1%        |
| Oil Subtotal                  | 24888.5        | 25903.1        | 26435.1        | 26967.3        | 27447.5        | 28032.5        | 28566.5        | 29108.4        | 29617.0        | 30105.9        | 30556.4        | 31059.6        | 31446.4        | 31858.6        | 32315.3        | 32844.0        | 33336.9        | 33748.5        | 34143.6        | 34575.5        | 34986.3        | 35421.8        | 1.6%        |
| Methanol                      | 8.1            | 21.1           | 29.8           | 40.1           | 50.7           | 55.1           | 63.3           | 72.1           | 78.9           | 86.4           | 93.7           | 101.0          | 107.8          | 114.2          | 120.5          | 126.5          | 132.0          | 137.2          | 141.7          | 145.7          | 149.0          | 152.0          | 14.3%       |
| Ethanol                       | 2.9            | 9.1            | 13.0           | 17.4           | 22.0           | 27.2           | 32.4           | 37.7           | 42.9           | 47.7           | 52.6           | 57.1           | 61.1           | 64.7           | 68.0           | 71.1           | 73.7           | 75.7           | 77.2           | 78.4           | 79.0           | 79.4           | 16.3%       |
| Electricity                   | 67.7           | 70.8           | 72.5           | 74.2           | 81.7           | 89.0           | 95.7           | 101.8          | 107.2          | 112.7          | 118.3          | 124.0          | 129.3          | 134.5          | 139.8          | 144.8          | 149.5          | 153.8          | 157.7          | 161.4          | 164.8          | 168.1          | 4.2%        |
| Compressed Natural Gas        | 22.1           | 52.5           | 75.5           | 98.1           | 119.2          | 139.6          | 158.1          | 174.2          | 188.5          | 202.6          | 216.7          | 230.4          |                |                |                |                |                |                |                |                |                |                |             |

### Table 33. Transportation Sector Energy Use by Mode and Type (Trillion Btu) (2 of 2)

1/ Commercial light trucks from 8,500 to 10,000 pounds.

2/ Does not include commercial bus and military use.

3/ Does not include military jet fuel use.

4/ Does not include military residual oil.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 values derived using: Energy Information Administration (EIA), Short-Term Energy Outlook, September 1999, Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.html> (October 12, 1999); EIA, Fuel Oil and Kerosene Sales 1997, DOE/EIA-0535(97) (Washington, D.C., August 1998); EIA, State Energy Data Report 1996, DOE/EIA-0214(96) (Washington, DC, February 1999); Oak Ridge National Laboratory, Transportation Energy Book: 17 and 18 (September 1998); Department of Defense, Defense Fuel Supply Center; and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode (1 of 2)  
(Trillion Btu per Year)**

1998-

|                                     | 1998           | 2000           | 2001           | 2002           | 2003           | 2004           | 2005           | 2006           | 2007           | 2008           | 2009           | 2010           | 2011           | 2012           | 2013           | 2014           | 2015           | 2016           | 2017           | 2018           | 2019           | 2020           | 2020         |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|
| <b>Light-Duty Vehicle</b>           |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| Motor Gasoline                      | 14368.1        | 14987.9        | 15335.7        | 15646.6        | 15877.0        | 16203.4        | 16488.8        | 16793.7        | 17093.5        | 17357.5        | 17626.8        | 17890.8        | 18109.8        | 18308.2        | 18531.7        | 18780.7        | 19016.8        | 19214.5        | 19401.4        | 19600.9        | 19796.0        | 20013.1        | 1.5%         |
| Methanol                            | 8.05           | 21.13          | 29.82          | 40.09          | 50.67          | 55.12          | 63.29          | 72.07          | 78.87          | 86.43          | 93.70          | 100.96         | 107.77         | 114.23         | 120.47         | 126.47         | 131.99         | 137.19         | 141.66         | 145.68         | 149.01         | 151.95         | 14.3%        |
| Ethanol                             | 2.85           | 9.07           | 12.96          | 17.44          | 21.98          | 27.15          | 32.42          | 37.73          | 42.88          | 47.71          | 52.55          | 57.10          | 61.07          | 64.69          | 68.04          | 71.07          | 73.67          | 75.70          | 77.21          | 78.35          | 79.03          | 79.38          | 16.3%        |
| Compressed Natural Gas              | 19.69          | 49.81          | 72.48          | 94.36          | 114.28         | 133.15         | 149.69         | 163.39         | 174.83         | 185.85         | 196.59         | 206.87         | 216.15         | 224.70         | 233.21         | 241.71         | 249.62         | 256.49         | 262.53         | 268.06         | 272.90         | 277.50         | 12.8%        |
| Liquid Petroleum Gas                | 24.45          | 35.00          | 42.52          | 49.69          | 56.03          | 62.13          | 67.49          | 71.98          | 75.79          | 79.46          | 83.02          | 86.44          | 89.53          | 92.34          | 95.17          | 98.00          | 100.63         | 102.89         | 104.83         | 106.55         | 107.98         | 109.31         | 7.0%         |
| Electricity                         | 0.45           | 1.04           | 1.41           | 1.77           | 2.15           | 2.52           | 2.89           | 3.26           | 3.63           | 4.00           | 4.37           | 4.74           | 5.11           | 5.48           | 5.85           | 6.22           | 6.59           | 6.96           | 7.33           | 7.70           | 8.07           | 8.44           | 26.0%        |
| Liquid Hydrogen                     | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | N/A          |
| Distillate (diesel)                 | 217.19         | 184.15         | 171.26         | 160.20         | 150.93         | 145.78         | 145.12         | 139.70         | 137.37         | 138.63         | 144.05         | 153.39         | 165.63         | 180.24         | 196.95         | 215.23         | 234.17         | 252.56         | 270.65         | 288.76         | 306.38         | 323.81         | 1.8%         |
| <b>Total</b>                        | <b>14640.8</b> | <b>15288.1</b> | <b>15666.1</b> | <b>16010.2</b> | <b>16278.9</b> | <b>16640.7</b> | <b>16966.2</b> | <b>17302.8</b> | <b>17631.6</b> | <b>17928.2</b> | <b>18233.5</b> | <b>18536.6</b> | <b>18795.2</b> | <b>19033.6</b> | <b>19298.6</b> | <b>19590.0</b> | <b>19867.1</b> | <b>20102.6</b> | <b>20324.0</b> | <b>20556.5</b> | <b>20781.5</b> | <b>21027.1</b> | <b>1.7%</b>  |
| <b>Commercial LT. Gasoline 1/</b>   |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| Motor Gasoline                      | 612.81         | 623.48         | 631.41         | 642.33         | 652.28         | 662.80         | 673.12         | 681.61         | 690.25         | 698.51         | 705.59         | 714.04         | 719.98         | 727.51         | 736.72         | 747.23         | 757.35         | 762.90         | 769.65         | 777.11         | 785.19         | 793.22         | 1.2%         |
| <b>Freight Trucks 2/</b>            |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| Motor Gasoline                      | 349.92         | 300.46         | 281.55         | 263.25         | 247.16         | 233.14         | 220.54         | 209.23         | 198.63         | 189.25         | 180.56         | 172.69         | 165.05         | 158.45         | 152.43         | 147.05         | 142.30         | 137.50         | 133.44         | 129.68         | 126.35         | 123.32         | -4.6%        |
| Distillate (diesel)                 | 3766.92        | 3960.88        | 4035.33        | 4128.42        | 4223.02        | 4304.24        | 4379.73        | 4428.92        | 4477.92        | 4518.67        | 4538.30        | 4573.18        | 4585.18        | 4611.68        | 4651.00        | 4695.16        | 4735.09        | 4746.08        | 4768.70        | 4788.81        | 4808.86        | 4828.95        | 1.1%         |
| Compressed Natural Gas              | 2.45           | 2.66           | 3.02           | 3.71           | 4.89           | 6.46           | 8.45           | 10.83          | 13.70          | 16.78          | 20.08          | 23.58          | 26.88          | 30.25          | 33.74          | 37.00          | 39.93          | 42.22          | 44.45          | 46.52          | 48.40          | 50.12          | 14.7%        |
| Liquid Petroleum Gas                | 20.61          | 19.34          | 19.10          | 18.79          | 18.77          | 18.66          | 18.80          | 19.08          | 19.36          | 19.70          | 20.05          | 20.45          | 20.75          | 21.10          | 21.52          | 21.94          | 22.33          | 22.55          | 22.81          | 23.05          | 23.28          | 23.49          | 0.6%         |
| <b>Total</b>                        | <b>4139.90</b> | <b>4283.34</b> | <b>4338.99</b> | <b>4414.16</b> | <b>4493.84</b> | <b>4562.49</b> | <b>4627.51</b> | <b>4668.05</b> | <b>4709.61</b> | <b>4744.40</b> | <b>4758.99</b> | <b>4789.90</b> | <b>4797.85</b> | <b>4821.49</b> | <b>4858.68</b> | <b>4901.15</b> | <b>4939.66</b> | <b>4948.35</b> | <b>4969.39</b> | <b>4988.05</b> | <b>5006.89</b> | <b>5025.89</b> | <b>0.9%</b>  |
| <b>Freight Rail 3/</b>              |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| Distillate (diesel)                 | 456.23         | 462.14         | 467.40         | 471.36         | 473.06         | 477.25         | 479.10         | 483.22         | 484.18         | 485.32         | 481.14         | 483.54         | 486.03         | 485.32         | 486.09         | 486.60         | 488.17         | 489.54         | 490.27         | 490.49         | 490.67         | 490.98         | 0.3%         |
| <b>Total</b>                        | <b>456.23</b>  | <b>462.14</b>  | <b>467.40</b>  | <b>471.36</b>  | <b>473.06</b>  | <b>477.25</b>  | <b>479.10</b>  | <b>483.22</b>  | <b>484.18</b>  | <b>485.32</b>  | <b>481.14</b>  | <b>483.54</b>  | <b>486.03</b>  | <b>485.32</b>  | <b>486.09</b>  | <b>486.60</b>  | <b>488.17</b>  | <b>489.54</b>  | <b>490.27</b>  | <b>490.49</b>  | <b>490.67</b>  | <b>490.98</b>  | <b>0.3%</b>  |
| <b>Domestic Shipping</b>            |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| Distillate (diesel)                 | 199.98         | 196.98         | 194.89         | 194.15         | 194.54         | 194.39         | 194.69         | 194.58         | 194.60         | 194.30         | 193.25         | 193.18         | 192.31         | 191.87         | 191.93         | 192.28         | 192.64         | 191.61         | 191.09         | 190.37         | 189.64         | 188.81         | -0.3%        |
| Residual Oil                        | 83.85          | 85.55          | 84.64          | 84.32          | 84.49          | 84.43          | 84.56          | 84.51          | 84.52          | 84.39          | 83.93          | 83.90          | 83.52          | 83.33          | 83.36          | 83.51          | 83.67          | 83.22          | 83.00          | 82.68          | 82.36          | 82.00          | -0.1%        |
| Motor Gasoline                      | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           | N/A          |
| <b>Total</b>                        | <b>283.83</b>  | <b>282.54</b>  | <b>279.53</b>  | <b>278.47</b>  | <b>279.03</b>  | <b>278.82</b>  | <b>279.25</b>  | <b>279.09</b>  | <b>279.11</b>  | <b>278.69</b>  | <b>277.19</b>  | <b>277.09</b>  | <b>275.83</b>  | <b>275.21</b>  | <b>275.29</b>  | <b>275.79</b>  | <b>276.30</b>  | <b>274.83</b>  | <b>274.09</b>  | <b>273.05</b>  | <b>272.00</b>  | <b>270.82</b>  | <b>-0.2%</b> |
| <b>International Shipping</b>       |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| Distillate (diesel)                 | 68.32          | 72.87          | 75.11          | 77.47          | 80.16          | 83.19          | 86.42          | 89.48          | 92.55          | 95.74          | 98.99          | 102.37         | 105.43         | 108.35         | 111.49         | 114.84         | 118.27         | 121.29         | 124.31         | 127.48         | 130.76         | 134.16         | 3.1%         |
| Residual Oil                        | 558.38         | 595.63         | 613.95         | 633.23         | 655.26         | 680.05         | 706.41         | 731.46         | 756.55         | 782.59         | 809.18         | 836.85         | 861.80         | 885.66         | 911.33         | 938.78         | 966.78         | 991.46         | 1016.15        | 1042.05        | 1068.85        | 1096.65        | 3.1%         |
| <b>Total</b>                        | <b>626.69</b>  | <b>668.49</b>  | <b>689.06</b>  | <b>710.70</b>  | <b>735.42</b>  | <b>763.25</b>  | <b>792.83</b>  | <b>820.94</b>  | <b>849.10</b>  | <b>878.33</b>  | <b>908.17</b>  | <b>939.23</b>  | <b>967.23</b>  | <b>994.00</b>  | <b>1022.81</b> | <b>1053.62</b> | <b>1085.05</b> | <b>1112.75</b> | <b>1140.46</b> | <b>1169.53</b> | <b>1199.60</b> | <b>1230.81</b> | <b>3.1%</b>  |
| <b>Air Transportation</b>           |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| Jet Fuel                            | 2901.97        | 3097.06        | 3199.06        | 3311.73        | 3447.43        | 3590.64        | 3718.25        | 3864.95        | 3984.46        | 4123.87        | 4244.51        | 4394.21        | 4502.25        | 4639.38        | 4773.23        | 4941.71        | 5088.89        | 5235.62        | 5363.83        | 5517.99        | 5654.63        | 5792.36        | 3.2%         |
| Aviation Gasoline                   | 42.79          | 42.56          | 42.48          | 42.41          | 42.35          | 42.30          | 42.26          | 42.23          | 42.20          | 42.18          | 42.16          | 42.14          | 42.13          | 42.12          | 42.11          | 42.10          | 42.10          | 42.09          | 42.09          | 42.08          | 42.08          | 42.08          | -0.1%        |
| <b>Total</b>                        | <b>2944.76</b> | <b>3139.62</b> | <b>3241.53</b> | <b>3354.14</b> | <b>3489.78</b> | <b>3632.94</b> | <b>3760.51</b> | <b>3907.17</b> | <b>4026.66</b> | <b>4166.05</b> | <b>4286.67</b> | <b>4436.35</b> | <b>4544.38</b> | <b>4681.50</b> | <b>4815.34</b> | <b>4983.82</b> | <b>5130.99</b> | <b>5277.71</b> | <b>5405.92</b> | <b>5560.07</b> | <b>5696.71</b> | <b>5834.43</b> | <b>3.2%</b>  |
| <b>Miscellaneous Transportation</b> |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| <b>Military Use</b>                 |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |              |
| Jet Fuel                            | 455.03         | 460.73         | 456.90         | 454.65         | 451.78         | 450.38         | 453.27         | 458.00         | 462.20         | 466.55         | 470.53         | 472.66         | 473.26         | 474.53         | 475.85         | 477.18         | 478.53         | 479.89         | 481.27         | 482.66         | 484.06         | 485.46         | 0.3%         |
| Residual Fuel                       | 7.77           | 8.21           | 8.14           | 8.10           | 8.05           | 8.02           | 8.08           | 8.16           | 8.23           | 8.31           | 8.38           | 8.42           | 8.43           | 8.45           | 8.48           | 8.50           | 8.53           | 8.55           | 8.57           | 8.60           | 8.62           | 8.65           | 0.5%         |
| Distillate                          | 58.46          | 59.59          | 59.10          | 58.81          | 58.44          | 58.25          | 58.63          | 59.24          | 59.78          | 60.35          | 60.86          | 61.14          | 61.21          | 61.38          | 61.55          | 61.72          | 61.89          | 62.07          | 62.25          | 62.43          | 62.61          | 62.79          | 0.3%         |
| <b>Total</b>                        | <b>521.26</b>  | <b>528.54</b>  | <b>524.14</b>  | <b>521.56</b>  | <b>518.27</b>  | <b>516.66</b>  | <b>519.97</b>  | <b>525.40</b>  | <b>530.22</b>  | <b>535.21</b>  | <b>539.77</b>  | <b>542.22</b>  | <b>542.91</b>  | <b>544.37</b>  | <b>545.87</b>  | <b>547.40</b>  | <b>548.95</b>  | <b>550.51</b>  | <b>552.09</b>  | <b>553.69</b>  | <b>555.29</b>  | <b>556.90</b>  | <b>0.3%</b>  |

**Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode (2 of 2)  
(Trillion Btu per Year)**

|                              | 1998           | 2000           | 2001           | 2002           | 2003           | 2004           | 2005           | 2006           | 2007           | 2008           | 2009           | 2010           | 2011           | 2012           | 2013           | 2014           | 2015           | 2016           | 2017           | 2018           | 2019           | 2020           | 1998-2020   |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|
| <b>Bus Transportation</b>    |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |             |
| Transit Bus (motor gasoline) | 4.06           | 4.04           | 4.06           | 4.07           | 4.08           | 4.09           | 4.10           | 4.11           | 4.11           | 4.12           | 4.12           | 4.12           | 4.11           | 4.11           | 4.10           | 4.09           | 4.09           | 4.08           | 4.07           | 4.06           | 4.05           | 4.04           | 0.0%        |
| Transit Bus (diesel)         | 68.93          | 69.30          | 69.52          | 69.70          | 69.87          | 70.11          | 70.27          | 70.41          | 70.51          | 70.59          | 70.62          | 70.59          | 70.49          | 70.38          | 70.25          | 70.15          | 70.05          | 69.93          | 69.77          | 69.58          | 69.39          | 69.18          | 0.0%        |
| Intercity Bus (diesel)       | 19.82          | 19.92          | 19.99          | 20.04          | 20.09          | 20.16          | 20.20          | 20.24          | 20.27          | 20.29          | 20.30          | 20.29          | 20.26          | 20.23          | 20.19          | 20.17          | 20.14          | 20.10          | 20.06          | 20.00          | 19.95          | 19.89          | 0.0%        |
| School Bus (motor gasoline)  | 3.27           | 3.25           | 3.26           | 3.27           | 3.28           | 3.29           | 3.30           | 3.31           | 3.31           | 3.31           | 3.32           | 3.31           | 3.31           | 3.30           | 3.30           | 3.29           | 3.29           | 3.28           | 3.28           | 3.27           | 3.26           | 3.25           | 0.0%        |
| School Bus (diesel)          | 55.47          | 55.77          | 55.95          | 56.10          | 56.23          | 56.42          | 56.55          | 56.66          | 56.75          | 56.81          | 56.83          | 56.81          | 56.73          | 56.64          | 56.53          | 56.45          | 56.38          | 56.28          | 56.15          | 56.00          | 55.84          | 55.68          | 0.0%        |
| <b>Total</b>                 | <b>151.55</b>  | <b>152.28</b>  | <b>152.77</b>  | <b>153.18</b>  | <b>153.54</b>  | <b>154.07</b>  | <b>154.42</b>  | <b>154.73</b>  | <b>154.95</b>  | <b>155.12</b>  | <b>155.18</b>  | <b>155.12</b>  | <b>154.90</b>  | <b>154.66</b>  | <b>154.37</b>  | <b>154.15</b>  | <b>153.94</b>  | <b>153.67</b>  | <b>153.32</b>  | <b>152.92</b>  | <b>152.49</b>  | <b>152.04</b>  | <b>0.0%</b> |
| <b>Rail Transportation</b>   |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |             |
| Intercity Rail (electricity) | 7.66           | 7.94           | 8.10           | 8.25           | 8.40           | 8.55           | 8.70           | 8.84           | 8.99           | 9.13           | 9.28           | 9.43           | 9.58           | 9.72           | 9.87           | 10.02          | 10.18          | 10.32          | 10.47          | 10.62          | 10.78          | 10.94          | 1.6%        |
| Intercity Rail (diesel)      | 11.66          | 12.13          | 12.37          | 12.60          | 12.83          | 13.06          | 13.28          | 13.50          | 13.72          | 13.95          | 14.18          | 14.41          | 14.63          | 14.85          | 15.08          | 15.31          | 15.54          | 15.76          | 15.99          | 16.22          | 16.47          | 16.71          | 1.6%        |
| Transit Rail (electricity)   | 44.49          | 46.11          | 47.01          | 47.89          | 48.78          | 49.65          | 50.48          | 51.31          | 52.16          | 53.01          | 53.88          | 54.75          | 55.59          | 56.43          | 57.30          | 58.18          | 59.06          | 59.91          | 60.76          | 61.66          | 62.58          | 63.51          | 1.6%        |
| Commuter Rail (electricity)  | 15.14          | 15.69          | 15.99          | 16.29          | 16.60          | 16.89          | 17.18          | 17.46          | 17.75          | 18.04          | 18.33          | 18.63          | 18.91          | 19.20          | 19.50          | 19.80          | 20.10          | 20.38          | 20.67          | 20.98          | 21.29          | 21.61          | 1.6%        |
| Commuter Rail (diesel)       | 23.02          | 23.96          | 24.42          | 24.88          | 25.34          | 25.80          | 26.23          | 26.66          | 27.10          | 27.55          | 28.00          | 28.45          | 28.88          | 29.32          | 29.77          | 30.23          | 30.69          | 31.13          | 31.57          | 32.04          | 32.52          | 33.00          | 1.6%        |
| <b>Total</b>                 | <b>101.97</b>  | <b>105.82</b>  | <b>107.89</b>  | <b>109.92</b>  | <b>111.95</b>  | <b>113.96</b>  | <b>115.87</b>  | <b>117.77</b>  | <b>119.72</b>  | <b>121.68</b>  | <b>123.67</b>  | <b>125.67</b>  | <b>127.59</b>  | <b>129.53</b>  | <b>131.51</b>  | <b>133.54</b>  | <b>135.57</b>  | <b>137.50</b>  | <b>139.47</b>  | <b>141.52</b>  | <b>143.64</b>  | <b>145.77</b>  | <b>1.6%</b> |
| <b>Recreation Boats</b>      | <b>250.86</b>  | <b>254.23</b>  | <b>256.16</b>  | <b>258.05</b>  | <b>259.99</b>  | <b>262.30</b>  | <b>264.42</b>  | <b>266.48</b>  | <b>268.53</b>  | <b>270.53</b>  | <b>272.51</b>  | <b>274.55</b>  | <b>276.35</b>  | <b>278.22</b>  | <b>280.28</b>  | <b>282.56</b>  | <b>284.85</b>  | <b>286.79</b>  | <b>288.69</b>  | <b>290.70</b>  | <b>292.78</b>  | <b>294.90</b>  | <b>0.7%</b> |
| Lubricants                   | 258.64         | 267.89         | 270.92         | 273.10         | 275.02         | 278.17         | 282.92         | 286.96         | 290.62         | 293.44         | 295.17         | 297.68         | 299.40         | 301.68         | 304.99         | 309.18         | 313.67         | 316.75         | 319.69         | 321.90         | 323.75         | 325.91         | 1.1%        |
| Pipeline Fuel Natural Gas    | 751.47         | 770.67         | 747.61         | 745.82         | 751.92         | 754.40         | 767.84         | 788.86         | 812.61         | 829.99         | 840.58         | 866.37         | 881.34         | 895.16         | 909.51         | 927.41         | 948.13         | 957.35         | 968.46         | 977.57         | 983.26         | 987.94         | 1.3%        |
| <b>Total Miscellaneous</b>   | <b>2035.75</b> | <b>2079.43</b> | <b>2059.49</b> | <b>2061.64</b> | <b>2070.69</b> | <b>2079.57</b> | <b>2105.45</b> | <b>2140.18</b> | <b>2176.64</b> | <b>2205.97</b> | <b>2226.90</b> | <b>2261.61</b> | <b>2282.49</b> | <b>2303.61</b> | <b>2326.54</b> | <b>2354.24</b> | <b>2385.11</b> | <b>2402.58</b> | <b>2421.71</b> | <b>2438.31</b> | <b>2451.20</b> | <b>2463.47</b> | <b>0.9%</b> |
| <b>Total Consumption</b>     | <b>25740.7</b> | <b>26827.2</b> | <b>27373.5</b> | <b>27942.9</b> | <b>28473.0</b> | <b>29097.8</b> | <b>29683.9</b> | <b>30283.1</b> | <b>30847.2</b> | <b>31385.4</b> | <b>31878.2</b> | <b>32438.4</b> | <b>32868.9</b> | <b>33322.2</b> | <b>33820.1</b> | <b>34392.4</b> | <b>34929.7</b> | <b>35371.2</b> | <b>35795.5</b> | <b>36253.1</b> | <b>36683.7</b> | <b>37136.8</b> | <b>1.7%</b> |

1/ Commercial trucks from 8,500 to 10,000 pounds.

2/ Does not include military distillate. Does not include commercial buses.

3/ Does not include passenger rail.

Btu = British thermal unit.

N/A = Not applicable.

L/I = Light Trucks.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 compressed natural gas volumes: Energy Information Administration (EIA), AEO2000 National Energy Modeling System run AEO2K.D100199A. Other 1998 values derived using: EIA, Short-Term Energy Outlook, September 1999, Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.html> (October 12, 1999); EIA, Fuel Oil and Kerosene Sales 1997, DOE/EIA-0535(97) (Washington, D.C., August 1998); EIA, State Energy Data Report 1996, DOE/EIA-0214(96) (Washington, DC, February 1999); Oak Ridge National Laboratory, Transportation Energy Book: 17 and 18 (September 1998); Department of Defense, Defense Fuel Supply Center, and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 35. Light-Duty Vehicle Energy Consumption by Technology Type and Fuel Type (Trillion Btu) (1 of 1)**

1998-

|   | 1998    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2020  |     |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-----|
| Light-Duty Consumption by Technology Type |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |     |
| Conventional Vehicles 1/                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |     |
| Gasoline ICE Vehicles                     | 14340.9 | 14926.2 | 15253.2 | 15539.4 | 15742.6 | 16035.3 | 16291.5 | 16568.4 | 16841.3 | 17083.0 | 17332.1 | 17579.3 | 17786.3 | 17975.3 | 18192.1 | 18437.7 | 18673.7 | 18873.2 | 19064.3 | 19269.7 | 19472.2 | 19698.0 | 1.5%  |     |
| TDI Diesel ICE                            | 217.19  | 184.15  | 171.26  | 160.20  | 150.93  | 145.78  | 145.12  | 139.70  | 137.37  | 138.63  | 144.05  | 153.39  | 165.63  | 180.24  | 196.95  | 215.23  | 234.17  | 252.56  | 270.65  | 288.76  | 306.38  | 323.81  | 1.8%  |     |
| Alternative-Fuel Vehicles                 |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |     |
| Alcohol Fuel Technology                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |     |
| Methanol-Flex Fuel ICE                    | 16.38   | 51.26   | 74.88   | 101.97  | 131.00  | 158.99  | 185.93  | 212.14  | 235.78  | 256.94  | 275.82  | 292.21  | 304.94  | 315.96  | 324.94  | 331.69  | 335.99  | 339.45  | 341.08  | 341.71  | 341.06  | 339.76  | 14.8% |     |
| Methanol ICE                              | 0.03    | 0.09    | 0.16    | 0.26    | 0.42    | 0.66    | 1.03    | 1.60    | 2.42    | 3.63    | 5.39    | 7.85    | 10.97   | 14.20   | 17.90   | 22.01   | 26.32   | 30.59   | 34.69   | 38.63   | 42.32   | 45.80   | 40.7% |     |
| Ethanol-Flex Fuel ICE                     | 10.42   | 33.08   | 47.13   | 63.42   | 80.47   | 99.20   | 118.12  | 137.07  | 155.08  | 171.21  | 186.70  | 200.24  | 210.94  | 219.51  | 226.43  | 231.58  | 234.81  | 236.32  | 236.40  | 235.63  | 233.85  | 231.46  | 15.1% |     |
| Ethanol Ice                               | 0.01    | 0.04    | 0.08    | 0.12    | 0.20    | 0.32    | 0.52    | 0.81    | 1.24    | 1.84    | 2.63    | 3.65    | 4.83    | 6.22    | 7.79    | 9.50    | 11.28   | 12.95   | 14.46   | 15.84   | 17.02   | 18.03   | 39.8% |     |
| Total Alcohol                             | 26.84   | 84.48   | 122.25  | 165.77  | 212.09  | 259.18  | 305.60  | 351.61  | 394.52  | 433.62  | 470.54  | 503.94  | 531.68  | 555.89  | 577.06  | 594.78  | 608.40  | 619.31  | 626.62  | 631.81  | 634.26  | 635.05  | 15.5% |     |
| Natural Gas Technology                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |     |
| CNG ICE                                   | 19.22   | 48.48   | 70.57   | 91.82   | 111.11  | 129.33  | 145.26  | 158.41  | 169.36  | 179.98  | 190.36  | 200.34  | 209.44  | 217.87  | 226.31  | 234.79  | 242.75  | 249.74  | 255.94  | 261.64  | 266.70  | 271.53  | 12.8% |     |
| CNG Bi-fuel                               | 0.93    | 2.66    | 3.80    | 5.05    | 6.31    | 7.61    | 8.82    | 9.93    | 10.90   | 11.71   | 12.43   | 13.01   | 13.38   | 13.62   | 13.76   | 13.80   | 13.70   | 13.48   | 13.17   | 12.80   | 12.38   | 11.92   | 12.3% |     |
| LPG ICE                                   | 24.24   | 34.42   | 41.72   | 48.66   | 54.77   | 60.61   | 65.73   | 70.01   | 73.64   | 77.16   | 80.62   | 83.96   | 87.00   | 89.81   | 92.65   | 95.51   | 98.21   | 100.55  | 102.58  | 104.42  | 105.97  | 107.43  | 7.0%  |     |
| LPG Bi-fuel                               | 0.66    | 1.82    | 2.54    | 3.31    | 4.06    | 4.84    | 5.56    | 6.21    | 6.77    | 7.21    | 7.56    | 7.81    | 7.93    | 7.96    | 7.92    | 7.79    | 7.59    | 7.33    | 7.03    | 6.70    | 6.34    | 5.97    | 10.5% |     |
| Total Natural Gas Technology              | 45.05   | 87.38   | 118.63  | 148.84  | 176.26  | 202.40  | 225.37  | 244.55  | 260.67  | 276.06  | 290.97  | 305.13  | 317.75  | 329.26  | 340.64  | 351.90  | 362.24  | 371.09  | 378.71  | 385.56  | 391.38  | 396.85  | 10.4% |     |
| Electric Technology                       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |     |
| Electric Vehicle                          | 0.45    | 1.04    | 1.41    | 1.77    | 2.19    | 2.64    | 3.13    | 3.66    | 4.23    | 4.84    | 5.50    | 6.21    | 6.97    | 7.78    | 8.63    | 9.53    | 10.47   | 11.46   | 12.49   | 13.56   | 14.68   | 15.84   | 26.0% |     |
| Electric-Diesel Hybrid                    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.01    | 0.01    | 0.01    | 0.01    | 0.02    | 0.02    | 0.02    | 0.02    | 0.02    | 0.02    | 0.02    | 0.02    | 0.02  |     |
| Total Electricity                         | 0.45    | 1.04    | 1.41    | 1.77    | 2.19    | 2.64    | 3.13    | 3.66    | 4.23    | 4.84    | 5.50    | 6.21    | 6.97    | 7.78    | 8.63    | 9.53    | 10.47   | 11.46   | 12.49   | 13.56   | 14.68   | 15.84   | 26.0% |     |
| Fuel Cell Technology                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |     |
| Fuel Cell Gasoline                        | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |     |
| Fuel Cell Methanol                        | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00  | N/A |
| Fuel Cell Hydrogen                        | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00  | N/A |
| Total Fuel Cell                           | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00  | N/A |
| Light-Duty Consumption by Fuel Type 1/    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |     |
| Motor Gasoline                            | 14368.1 | 14987.9 | 15335.7 | 15646.6 | 15877.0 | 16203.4 | 16488.8 | 16793.7 | 17093.5 | 17357.5 | 17626.8 | 17890.8 | 18109.8 | 18308.2 | 18531.7 | 18780.7 | 19016.8 | 19214.5 | 19401.4 | 19600.9 | 19796.0 | 20013.1 | 1.5%  |     |
| Distillate (diesel)                       | 217.19  | 184.15  | 171.26  | 160.20  | 150.93  | 145.78  | 145.12  | 139.70  | 137.37  | 138.63  | 144.05  | 153.39  | 165.63  | 180.24  | 196.95  | 215.23  | 234.17  | 252.56  | 270.65  | 288.76  | 306.38  | 323.81  | 1.8%  |     |
| Methanol                                  | 8.05    | 21.13   | 29.82   | 40.09   | 50.67   | 55.12   | 63.29   | 72.07   | 78.87   | 86.43   | 93.70   | 100.96  | 107.77  | 114.23  | 120.47  | 126.47  | 131.99  | 137.19  | 141.66  | 145.68  | 149.01  | 151.95  | 14.3% |     |
| Ethanol                                   | 2.85    | 9.07    | 12.96   | 17.44   | 21.98   | 27.15   | 32.42   | 37.73   | 42.88   | 47.71   | 52.55   | 57.10   | 61.07   | 64.69   | 68.04   | 71.07   | 73.67   | 75.70   | 77.21   | 78.35   | 79.03   | 79.38   | 16.3% |     |
| Compressed Natural Gas                    | 19.69   | 49.81   | 72.48   | 94.36   | 114.28  | 133.15  | 149.69  | 163.39  | 174.83  | 185.85  | 196.59  | 206.87  | 216.15  | 224.70  | 233.21  | 241.71  | 249.62  | 256.49  | 262.53  | 268.06  | 272.90  | 277.50  | 12.8% |     |
| Liquid Petroleum Gas                      | 24.45   | 35.00   | 42.52   | 49.69   | 56.03   | 62.13   | 67.49   | 71.98   | 75.79   | 79.46   | 83.02   | 86.44   | 89.53   | 92.34   | 95.17   | 98.00   | 100.63  | 102.89  | 104.83  | 106.55  | 107.98  | 109.31  | 7.0%  |     |
| Electricity                               | 0.45    | 1.04    | 1.41    | 1.77    | 2.19    | 2.64    | 3.13    | 3.66    | 4.23    | 4.84    | 5.50    | 6.21    | 6.97    | 7.78    | 8.63    | 9.53    | 10.47   | 11.46   | 12.49   | 13.56   | 14.68   | 15.84   | 26.0% |     |
| Liquid Hydrogen                           | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |     |

1/ Includes personal vehicles and fleet vehicles. Includes both cars and trucks.

LDI = Turbo Direct Injection.

Btu = British thermal unit.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

ICE = Internal combustion engine.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 36. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)**  
**01 - New England**

1998-

|                                  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020   |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| <b>New Car Sales 1/</b>          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| <b>Conventional Vehicles</b>     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles            | 370.0 | 342.8 | 331.6 | 324.0 | 313.9 | 317.2 | 318.7 | 315.2 | 310.5 | 307.6 | 304.8 | 305.7 | 301.9 | 300.0 | 303.6 | 310.3 | 314.1 | 308.0 | 304.6 | 303.2 | 304.4 | 307.1 | -0.8%  |
| TDI Diesel ICE                   | 0.1   | 0.4   | 0.5   | 0.9   | 1.3   | 2.1   | 3.4   | 2.7   | 4.0   | 5.6   | 7.2   | 8.9   | 10.1  | 11.2  | 12.1  | 13.0  | 13.6  | 13.5  | 13.5  | 13.6  | 13.8  | 14.0  | 23.0%  |
| Total Conventional               | 370.2 | 343.2 | 332.1 | 324.8 | 315.2 | 319.3 | 322.1 | 317.9 | 314.5 | 313.2 | 312.0 | 314.6 | 312.0 | 311.2 | 315.7 | 323.3 | 327.7 | 321.5 | 318.2 | 316.8 | 318.2 | 321.1 | -0.6%  |
| <b>Alternative-Fuel Vehicles</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE           | 8.3   | 8.9   | 10.3  | 11.5  | 12.0  | 12.8  | 13.0  | 12.7  | 12.2  | 11.6  | 10.9  | 10.4  | 9.7   | 9.4   | 9.1   | 9.1   | 8.9   | 10.1  | 9.7   | 9.5   | 9.4   | 9.3   | 0.5%   |
| Methanol ICE                     | 0.2   | 0.6   | 0.8   | 0.8   | 0.8   | 0.8   | 0.9   | 1.0   | 1.1   | 1.3   | 1.5   | 1.8   | 2.1   | 2.1   | 2.3   | 2.5   | 2.6   | 2.6   | 2.5   | 2.5   | 2.4   | 2.4   | 10.8%  |
| Ethanol-Flex Fuel ICE            | 5.4   | 6.3   | 7.0   | 7.8   | 8.1   | 8.6   | 8.7   | 8.4   | 8.0   | 7.5   | 7.8   | 7.3   | 6.7   | 6.3   | 6.1   | 5.9   | 5.8   | 5.6   | 5.3   | 5.1   | 4.9   | 4.8   | -0.5%  |
| Ethanol ICE                      | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.3   | 0.4   | 0.4   | 0.5   | 0.6   | 0.7   | 0.7   | 0.8   | 0.8   | 0.8   | 0.7   | 0.7   | 0.6   | 0.6   | 14.4%  |
| Electric Vehicle                 | 0.1   | 0.1   | 0.1   | 0.1   | 12.4  | 12.7  | 12.9  | 12.9  | 12.8  | 12.8  | 12.8  | 13.0  | 12.9  | 12.9  | 13.2  | 13.5  | 13.8  | 13.6  | 13.5  | 13.5  | 13.6  | 13.8  | 28.6%  |
| Electric-Diesel Hybrid           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 83.8%  |
| CNG ICE                          | 1.6   | 3.3   | 4.0   | 3.9   | 4.0   | 4.1   | 4.2   | 4.2   | 4.2   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   | 4.4   | 4.5   | 4.5   | 4.4   | 4.4   | 4.3   | 4.3   | 4.3   | 4.6%   |
| CNG Bi-fuel                      | 0.6   | 0.7   | 0.8   | 0.8   | 0.9   | 0.9   | 0.9   | 0.8   | 0.7   | 0.7   | 0.7   | 0.6   | 0.6   | 0.6   | 0.5   | 0.5   | 0.5   | 0.5   | 0.4   | 0.4   | 0.4   | 0.4   | -2.1%  |
| LPG ICE                          | 0.9   | 1.4   | 1.6   | 1.6   | 1.7   | 1.7   | 1.8   | 1.8   | 1.8   | 1.9   | 1.9   | 1.9   | 1.9   | 1.8   | 1.9   | 1.9   | 1.9   | 1.9   | 1.8   | 1.8   | 1.8   | 1.8   | 3.4%   |
| LPG Bi-fuel                      | 0.5   | 0.5   | 0.5   | 0.6   | 0.6   | 0.6   | 0.6   | 0.5   | 0.5   | 0.4   | 0.4   | 0.3   | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | -5.3%  |
| Fuel Cell Gasoline               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives               | 17.5  | 21.7  | 25.2  | 27.2  | 40.6  | 42.4  | 43.1  | 42.6  | 41.7  | 40.8  | 40.7  | 40.2  | 39.0  | 38.4  | 38.5  | 39.0  | 39.6  | 38.7  | 38.0  | 37.6  | 37.4  | 37.4  | 3.5%   |
| Percent Alternative Car Sales    | 4.51  | 5.95  | 7.04  | 7.72  | 11.42 | 11.73 | 11.81 | 11.83 | 11.70 | 11.53 | 11.53 | 11.32 | 11.11 | 10.98 | 10.86 | 10.76 | 10.63 | 10.97 | 10.84 | 10.71 | 10.57 | 10.43 | 3.9%   |
| Total New Car Sales              | 387.7 | 364.9 | 357.3 | 352.0 | 355.8 | 361.7 | 365.2 | 360.5 | 356.1 | 354.0 | 352.7 | 354.8 | 351.0 | 349.6 | 354.2 | 362.3 | 366.7 | 361.2 | 356.9 | 354.8 | 355.9 | 358.5 | -0.4%  |
| <b>New Light-Truck Sales 2/</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| <b>Conventional Vehicles</b>     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles            | 307.2 | 301.6 | 300.8 | 302.1 | 310.3 | 318.9 | 325.1 | 328.8 | 328.1 | 328.7 | 329.6 | 333.3 | 331.5 | 331.2 | 337.2 | 346.5 | 352.1 | 348.2 | 345.2 | 344.4 | 346.4 | 349.9 | 0.6%   |
| TDI Diesel ICE                   | 0.2   | 0.5   | 0.7   | 1.2   | 1.9   | 3.3   | 5.3   | 1.5   | 2.3   | 3.3   | 4.4   | 5.4   | 6.2   | 6.8   | 7.1   | 7.5   | 7.7   | 7.5   | 7.4   | 7.3   | 7.2   | 7.2   | 18.8%  |
| Total Conventional               | 307.4 | 302.1 | 301.5 | 303.2 | 312.2 | 322.2 | 330.3 | 330.4 | 330.4 | 332.0 | 334.0 | 338.8 | 337.6 | 337.9 | 344.3 | 354.0 | 359.8 | 355.7 | 352.6 | 351.7 | 353.6 | 357.1 | 0.7%   |
| <b>Alternative-Fuel Vehicles</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE           | 2.3   | 2.6   | 3.2   | 3.9   | 4.5   | 4.8   | 4.9   | 4.9   | 4.7   | 4.4   | 4.2   | 4.0   | 3.7   | 4.0   | 3.8   | 3.7   | 3.5   | 3.2   | 3.0   | 2.7   | 2.5   | 2.3   | 0.2%   |
| Methanol ICE                     | 0.3   | 0.7   | 1.0   | 1.1   | 1.1   | 1.1   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.4   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 7.2%   |
| Ethanol-Flex Fuel ICE            | 1.3   | 1.6   | 2.1   | 2.6   | 2.9   | 3.1   | 3.2   | 3.1   | 2.9   | 2.7   | 2.5   | 2.3   | 2.1   | 2.0   | 1.8   | 1.7   | 1.6   | 1.4   | 1.3   | 1.1   | 1.0   | 0.9   | -1.8%  |
| Ethanol ICE                      | 0.0   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 8.1%   |
| Electric Vehicle                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.1   | 0.1   | 0.0   | 0.0   | 0.1   | 0.1   | 4.5%   |
| Electric-Diesel Hybrid           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 90.3%  |
| CNG ICE                          | 1.0   | 2.5   | 3.4   | 3.4   | 3.5   | 3.6   | 3.7   | 3.7   | 3.7   | 3.7   | 3.8   | 3.8   | 3.8   | 3.8   | 3.9   | 4.0   | 4.0   | 4.0   | 3.9   | 3.9   | 3.9   | 4.0   | 6.3%   |
| CNG Bi-fuel                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -12.5% |
| LPG ICE                          | 0.6   | 1.0   | 1.2   | 1.3   | 1.3   | 1.3   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.5   | 1.5   | 1.5   | 1.4   | 1.4   | 1.4   | 1.4   | 4.5%   |
| LPG Bi-fuel                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -13.3% |
| Fuel Cell Gasoline               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives               | 5.6   | 8.6   | 11.3  | 12.5  | 13.5  | 14.2  | 14.5  | 14.6  | 14.1  | 13.7  | 13.3  | 13.1  | 12.6  | 12.7  | 12.5  | 12.4  | 12.2  | 11.7  | 11.2  | 10.8  | 10.5  | 10.2  | 2.8%   |

**Table 36. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
01 - New England**

|                                 | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Percent Alternative LT. Sales   | 1.77  | 2.77  | 3.60  | 3.95  | 4.14  | 4.23  | 4.22  | 4.22  | 4.10  | 3.97  | 3.84  | 3.73  | 3.59  | 3.61  | 3.50  | 3.39  | 3.29  | 3.18  | 3.08  | 2.98  | 2.88  | 2.78  | 2.1%      |
| Total New Truck Sales           | 312.9 | 310.7 | 312.8 | 315.7 | 325.7 | 336.4 | 344.9 | 344.9 | 344.5 | 345.7 | 347.4 | 351.9 | 350.2 | 350.6 | 356.8 | 366.4 | 372.0 | 367.4 | 363.8 | 362.5 | 364.1 | 367.4 | 0.7%      |
| Percent Total Alternative Sales | 3.29  | 4.49  | 5.44  | 5.94  | 7.94  | 8.11  | 8.12  | 8.11  | 7.96  | 7.79  | 7.71  | 7.54  | 7.36  | 7.29  | 7.16  | 7.06  | 6.94  | 7.04  | 6.92  | 6.80  | 6.68  | 6.56  | 3.2%      |
| EPACT Leg. Alternative Sales    | 4.07  | 9.17  | 11.73 | 11.70 | 11.94 | 12.22 | 12.42 | 12.34 | 12.26 | 12.24 | 12.25 | 12.37 | 12.28 | 12.26 | 12.45 | 12.76 | 12.94 | 12.76 | 12.62 | 12.56 | 12.61 | 12.71 | 5.3%      |
| Z EVP Leg. Alternative Sales    | 0.00  | 0.00  | 0.00  | 0.00  | 30.79 | 31.50 | 32.05 | 31.89 | 31.72 | 31.75 | 31.84 | 32.22 | 32.06 | 32.09 | 32.66 | 33.57 | 34.13 | 33.77 | 33.52 | 33.48 | 33.72 | 34.14 | N/A       |
| Total Vehicles Sales            | 700.6 | 675.5 | 670.0 | 667.7 | 681.4 | 698.2 | 710.1 | 705.5 | 700.6 | 699.7 | 700.1 | 706.7 | 701.3 | 700.2 | 711.0 | 728.7 | 738.7 | 728.6 | 720.7 | 717.3 | 720.0 | 725.9 | 0.2%      |

1/ Includes personal and fleet light-duty cars.  
 2/ Includes personal and fleet light-duty trucks.  
 I DI = Turbo Direct Injection.  
 CNG = Compressed natural gas.  
 LPG = Liquid petroleum gas.  
 ICE = Internal combustion engine.  
 EPACT = Energy Policy Act of 1992.  
 Z EVP = Zero emission vehicles from the low emission vehicle program.  
 N/A = Not applicable.  
 L.T. = Light Truck.  
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 37. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)**  
**02 - Middle Atlantic**

1998-

|                                  | 1998          | 2000          | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2020         |
|----------------------------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>New Car Sales 1/</b>          |               |               |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Conventional Vehicles</b>     |               |               |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Gasoline ICE Vehicles            | 1060.9        | 960.5         | 921.4        | 893.4        | 864.5        | 868.7        | 868.7        | 855.3        | 839.5        | 829.0        | 818.7        | 818.5        | 805.3        | 797.9        | 804.4        | 819.3        | 826.1        | 807.8        | 796.4        | 790.4        | 791.4        | 796.2        | -1.3%        |
| TDI Diesel ICE                   | 0.4           | 0.9           | 1.4          | 2.2          | 3.4          | 5.5          | 8.6          | 6.9          | 10.1         | 14.0         | 18.2         | 22.3         | 25.2         | 27.8         | 29.9         | 31.7         | 33.1         | 32.5         | 32.4         | 32.4         | 32.6         | 33.0         | 22.2%        |
| <b>Total Conventional</b>        | <b>1061.3</b> | <b>961.5</b>  | <b>922.8</b> | <b>895.6</b> | <b>867.9</b> | <b>874.2</b> | <b>877.4</b> | <b>862.2</b> | <b>849.6</b> | <b>843.0</b> | <b>836.9</b> | <b>840.8</b> | <b>830.4</b> | <b>825.7</b> | <b>834.3</b> | <b>851.0</b> | <b>859.2</b> | <b>840.4</b> | <b>828.8</b> | <b>822.8</b> | <b>824.0</b> | <b>829.2</b> | <b>-1.1%</b> |
| <b>Alternative-Fuel Vehicles</b> |               |               |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Methanol-Flex Fuel ICE           | 22.4          | 26.6          | 30.6         | 33.7         | 35.0         | 37.0         | 37.3         | 36.2         | 34.2         | 32.0         | 29.4         | 27.2         | 25.0         | 23.6         | 22.7         | 22.2         | 21.6         | 24.2         | 23.4         | 22.8         | 22.5         | 22.2         | 0.0%         |
| Methanol ICE                     | 0.7           | 1.6           | 2.2          | 2.2          | 2.3          | 2.5          | 2.8          | 3.2          | 3.7          | 4.6          | 5.9          | 7.5          | 9.2          | 9.4          | 10.6         | 11.7         | 12.6         | 12.6         | 12.3         | 12.0         | 11.8         | 11.6         | 13.5%        |
| Ethanol-Flex Fuel ICE            | 14.5          | 18.2          | 20.1         | 22.2         | 23.0         | 24.1         | 24.1         | 23.2         | 21.7         | 20.1         | 20.4         | 18.6         | 16.7         | 15.4         | 14.6         | 14.0         | 13.4         | 13.0         | 12.3         | 11.8         | 11.4         | 11.0         | -1.3%        |
| Ethanol Ice                      | 0.1           | 0.2           | 0.3          | 0.3          | 0.4          | 0.4          | 0.5          | 0.7          | 0.8          | 1.1          | 1.3          | 1.6          | 1.8          | 2.1          | 2.2          | 2.4          | 2.5          | 2.4          | 2.3          | 2.1          | 1.9          | 1.8          | 14.7%        |
| Electric Vehicle                 | 0.2           | 0.3           | 0.3          | 0.3          | 29.1         | 29.7         | 30.3         | 30.1         | 30.0         | 30.0         | 30.1         | 30.4         | 30.3         | 30.3         | 30.8         | 31.7         | 32.2         | 31.9         | 31.6         | 31.6         | 31.8         | 32.2         | 27.4%        |
| Electric-Diesel Hybrid           | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 81.6%        |
| CNG ICE                          | 4.6           | 9.2           | 11.1         | 10.9         | 11.1         | 11.4         | 11.6         | 11.6         | 11.6         | 11.6         | 11.7         | 11.5         | 11.5         | 11.6         | 11.9         | 11.9         | 11.7         | 11.5         | 11.3         | 11.3         | 11.3         | 11.3         | 4.2%         |
| CNG Bi-fuel                      | 1.7           | 1.9           | 2.2          | 2.4          | 2.5          | 2.5          | 2.4          | 2.2          | 2.0          | 1.8          | 1.7          | 1.6          | 1.4          | 1.3          | 1.3          | 1.3          | 1.1          | 1.1          | 1.0          | 0.9          | 0.8          | 0.8          | -3.4%        |
| LPG ICE                          | 2.4           | 4.0           | 4.5          | 4.5          | 4.6          | 4.8          | 4.9          | 5.0          | 5.0          | 5.0          | 5.0          | 5.0          | 4.9          | 4.9          | 4.9          | 5.0          | 5.0          | 4.9          | 4.8          | 4.7          | 4.6          | 4.6          | 3.0%         |
| LPG Bi-fuel                      | 1.1           | 1.2           | 1.4          | 1.5          | 1.5          | 1.5          | 1.5          | 1.3          | 1.2          | 1.0          | 0.9          | 0.8          | 0.7          | 0.6          | 0.6          | 0.5          | 0.5          | 0.5          | 0.4          | 0.4          | 0.3          | 0.3          | -5.7%        |
| Fuel Cell Gasoline               | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | N/A          |
| Fuel Cell Methanol               | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | N/A          |
| Fuel Cell Hydrogen               | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | N/A          |
| <b>Total Alternatives</b>        | <b>47.7</b>   | <b>63.3</b>   | <b>72.8</b>  | <b>78.1</b>  | <b>109.4</b> | <b>113.9</b> | <b>115.4</b> | <b>113.4</b> | <b>110.2</b> | <b>107.1</b> | <b>106.2</b> | <b>104.4</b> | <b>101.4</b> | <b>99.0</b>  | <b>99.3</b>  | <b>100.8</b> | <b>101.0</b> | <b>102.2</b> | <b>99.6</b>  | <b>97.7</b>  | <b>96.5</b>  | <b>95.8</b>  | <b>3.2%</b>  |
| Percent Alternative Car Sales    | 4.30          | 6.18          | 7.31         | 8.02         | 11.20        | 11.53        | 11.62        | 11.63        | 11.48        | 11.27        | 11.26        | 11.05        | 10.88        | 10.71        | 10.64        | 10.59        | 10.52        | 10.84        | 10.73        | 10.61        | 10.48        | 10.35        | 4.1%         |
| <b>Total New Car Sales</b>       | <b>1109.0</b> | <b>1024.8</b> | <b>995.6</b> | <b>973.7</b> | <b>977.3</b> | <b>988.1</b> | <b>992.7</b> | <b>975.7</b> | <b>959.8</b> | <b>950.1</b> | <b>943.2</b> | <b>945.2</b> | <b>931.8</b> | <b>924.8</b> | <b>933.6</b> | <b>951.8</b> | <b>960.2</b> | <b>942.6</b> | <b>928.4</b> | <b>920.5</b> | <b>920.5</b> | <b>925.0</b> | <b>-0.8%</b> |
| <b>New Light-Truck Sales 2/</b>  |               |               |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Conventional Vehicles</b>     |               |               |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Gasoline ICE Vehicles            | 879.5         | 846.3         | 837.1        | 834.5        | 851.2        | 870.3        | 883.0        | 888.6        | 883.3        | 881.6        | 881.0        | 887.9        | 879.9        | 876.2        | 889.0        | 910.8        | 922.4        | 909.3        | 898.9        | 894.2        | 897.0        | 903.8        | 0.1%         |
| TDI Diesel ICE                   | 0.4           | 1.2           | 1.9          | 3.1          | 4.9          | 8.3          | 13.3         | 3.8          | 5.6          | 8.1          | 10.8         | 13.3         | 15.1         | 16.3         | 17.1         | 17.6         | 18.1         | 17.6         | 17.1         | 16.8         | 16.5         | 16.4         | 18.0%        |
| <b>Total Conventional</b>        | <b>880.0</b>  | <b>847.5</b>  | <b>839.1</b> | <b>837.5</b> | <b>856.1</b> | <b>878.6</b> | <b>896.3</b> | <b>892.4</b> | <b>888.9</b> | <b>889.7</b> | <b>891.8</b> | <b>901.2</b> | <b>894.9</b> | <b>892.5</b> | <b>906.1</b> | <b>928.4</b> | <b>940.5</b> | <b>926.9</b> | <b>916.1</b> | <b>910.9</b> | <b>913.5</b> | <b>920.2</b> | <b>0.2%</b>  |
| <b>Alternative-Fuel Vehicles</b> |               |               |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Methanol-Flex Fuel ICE           | 6.0           | 7.8           | 9.8          | 11.8         | 13.4         | 14.1         | 14.4         | 14.5         | 13.8         | 13.0         | 12.2         | 11.7         | 10.9         | 11.5         | 10.9         | 10.5         | 10.1         | 9.3          | 8.6          | 7.9          | 7.3          | 6.8          | 0.6%         |
| Methanol Ice                     | 0.8           | 2.1           | 2.9          | 2.9          | 3.0          | 3.1          | 3.2          | 3.2          | 3.3          | 3.4          | 3.5          | 3.6          | 3.7          | 3.7          | 3.8          | 3.9          | 4.0          | 3.9          | 3.8          | 3.7          | 3.6          | 3.6          | 7.0%         |
| Ethanol-Flex Fuel ICE            | 3.6           | 4.8           | 6.2          | 7.5          | 8.2          | 8.9          | 9.0          | 8.8          | 8.1          | 7.5          | 6.9          | 6.4          | 5.7          | 5.3          | 4.9          | 4.6          | 4.3          | 3.8          | 3.4          | 3.1          | 2.7          | 2.4          | -1.8%        |
| Ethanol ICE                      | 0.1           | 0.3           | 0.4          | 0.4          | 0.4          | 0.4          | 0.5          | 0.5          | 0.5          | 0.5          | 0.6          | 0.6          | 0.6          | 0.6          | 0.6          | 0.7          | 0.7          | 0.6          | 0.6          | 0.6          | 0.5          | 0.5          | 7.7%         |
| Electric Vehicle                 | 0.1           | 0.1           | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 0.1          | 4.0%         |
| Electric-Diesel Hybrid           | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 89.3%        |
| CNG ICE                          | 3.0           | 7.1           | 9.5          | 9.5          | 9.7          | 10.0         | 10.2         | 10.1         | 10.1         | 10.1         | 10.1         | 10.1         | 10.1         | 10.0         | 10.2         | 10.4         | 10.5         | 10.4         | 10.2         | 10.2         | 10.2         | 10.2         | 5.8%         |
| CNG Bi-fuel                      | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | -13.8%       |
| LPG ICE                          | 1.6           | 2.8           | 3.5          | 3.5          | 3.6          | 3.7          | 3.7          | 3.7          | 3.7          | 3.7          | 3.7          | 3.7          | 3.7          | 3.7          | 3.7          | 3.8          | 3.9          | 3.8          | 3.8          | 3.7          | 3.7          | 3.8          | 4.0%         |
| LPG Bi-fuel                      | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | -13.9%       |
| Fuel Cell Gasoline               | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | N/A          |
| Fuel Cell Methanol               | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | N/A          |
| Fuel Cell Hydrogen               | 0.0           | 0.0           | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | 0.0          | N/A          |
| <b>Total Alternatives</b>        | <b>15.2</b>   | <b>25.0</b>   | <b>32.5</b>  | <b>35.8</b>  | <b>38.5</b>  | <b>40.4</b>  | <b>41.1</b>  | <b>41.0</b>  | <b>39.6</b>  | <b>38.3</b>  | <b>37.1</b>  | <b>36.3</b>  | <b>34.8</b>  | <b>35.0</b>  | <b>34.3</b>  | <b>34.1</b>  | <b>33.5</b>  | <b>31.9</b>  | <b>30.5</b>  | <b>29.3</b>  | <b>28.3</b>  | <b>27.5</b>  | <b>2.7%</b>  |

**Table 37. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
02 - Middle Atlantic**

|                                 | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Percent Alternative LT. Sales   | 1.70   | 2.87   | 3.73   | 4.10   | 4.30   | 4.39   | 4.39   | 4.39   | 4.27   | 4.13   | 3.99   | 3.88   | 3.74   | 3.77   | 3.65   | 3.54   | 3.44   | 3.33   | 3.22   | 3.11   | 3.01   | 2.90   | 2.5%      |
| Total New Truck Sales           | 895.2  | 872.5  | 871.5  | 873.3  | 894.6  | 918.9  | 937.4  | 933.4  | 928.5  | 928.0  | 928.9  | 937.5  | 929.7  | 927.4  | 940.4  | 962.5  | 974.0  | 958.8  | 946.5  | 940.2  | 941.8  | 947.7  | 0.3%      |
| Percent Total Alternative Sales | 3.14   | 4.66   | 5.64   | 6.17   | 7.90   | 8.09   | 8.11   | 8.09   | 7.93   | 7.74   | 7.66   | 7.48   | 7.32   | 7.24   | 7.13   | 7.04   | 6.96   | 7.05   | 6.94   | 6.82   | 6.70   | 6.58   | 3.4%      |
| EPACT Leg. Alternative Sales    | 11.64  | 25.76  | 32.70  | 32.36  | 32.79  | 33.37  | 33.77  | 33.40  | 33.04  | 32.87  | 32.77  | 32.96  | 32.59  | 32.43  | 32.82  | 33.52  | 33.87  | 33.30  | 32.84  | 32.59  | 32.62  | 32.80  | 4.8%      |
| Z EVP Leg. Alternative Sales    | 0.00   | 0.00   | 0.00   | 0.00   | 71.92  | 73.60  | 74.90  | 74.51  | 74.14  | 74.19  | 74.42  | 75.32  | 74.93  | 75.00  | 76.35  | 78.48  | 79.79  | 78.94  | 78.35  | 78.26  | 78.84  | 79.80  | N/A       |
| Total Vehicles Sales            | 2004.2 | 1897.3 | 1867.1 | 1847.0 | 1872.0 | 1907.0 | 1930.2 | 1909.1 | 1888.3 | 1878.2 | 1872.0 | 1882.7 | 1861.6 | 1852.2 | 1874.0 | 1914.3 | 1934.2 | 1901.3 | 1875.0 | 1860.7 | 1862.4 | 1872.7 | -0.3%     |

1/ Includes personal and fleet light-duty cars.  
 2/ Includes personal and fleet light-duty trucks.  
 TDI = Turbo Direct Injection.  
 CNG = Compressed natural gas.  
 LPG = Liquid petroleum gas.  
 ICE = Internal combustion engine.  
 EPACT = Energy Policy Act of 1992.  
 Z EVP = Zero emission vehicles from the low emission vehicle program.  
 N/A = Not applicable.  
 LT = Light Truck.  
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 38. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)**  
**03 - East North Central**

1998-

|                                  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020   |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>New Car Sales 1/</b>          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>Conventional Vehicles</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gasoline ICE Vehicles            | 1221.5 | 1105.9 | 1064.8 | 1035.5 | 1038.6 | 1055.8 | 1061.7 | 1050.0 | 1036.3 | 1027.2 | 1017.3 | 1020.6 | 1007.7 | 1001.3 | 1012.4 | 1034.2 | 1046.2 | 1025.5 | 1013.5 | 1008.2 | 1011.5 | 1019.9 | -0.8%  |
| TDI Diesel ICE                   | 0.5    | 1.1    | 1.8    | 2.7    | 4.1    | 6.8    | 10.7   | 8.6    | 12.6   | 17.6   | 22.8   | 28.0   | 31.8   | 35.2   | 38.0   | 40.6   | 42.2   | 41.9   | 41.9   | 42.0   | 42.5   | 43.1   | 22.6%  |
| Total Conventional               | 1222.0 | 1107.0 | 1066.6 | 1038.3 | 1042.6 | 1062.5 | 1072.5 | 1058.6 | 1048.9 | 1044.8 | 1040.1 | 1048.6 | 1039.5 | 1036.5 | 1050.5 | 1074.8 | 1088.4 | 1067.5 | 1055.4 | 1050.2 | 1054.1 | 1062.9 | -0.6%  |
| <b>Alternative-Fuel Vehicles</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Methanol-Flex Fuel ICE           | 26.8   | 37.1   | 42.5   | 47.0   | 49.9   | 45.5   | 44.8   | 43.8   | 40.4   | 38.1   | 35.7   | 33.5   | 31.1   | 29.5   | 28.7   | 28.2   | 27.5   | 30.8   | 29.8   | 29.1   | 28.6   | 28.3   | 0.3%   |
| Methanol ICE                     | 0.8    | 1.9    | 2.5    | 2.6    | 2.7    | 2.9    | 3.1    | 3.4    | 3.8    | 4.5    | 5.5    | 6.7    | 7.9    | 8.0    | 8.7    | 9.5    | 10.0   | 10.0   | 9.8    | 9.6    | 9.4    | 9.3    | 11.7%  |
| Ethanol-Flex Fuel ICE            | 17.3   | 25.4   | 28.0   | 31.1   | 32.4   | 33.9   | 34.1   | 33.2   | 31.4   | 29.4   | 30.5   | 28.3   | 25.7   | 24.1   | 23.1   | 22.5   | 21.8   | 21.2   | 20.3   | 19.6   | 19.1   | 18.6   | 0.3%   |
| Ethanol ICE                      | 0.1    | 0.3    | 0.4    | 0.4    | 0.5    | 0.6    | 0.8    | 1.0    | 1.3    | 1.7    | 2.2    | 2.7    | 3.2    | 3.7    | 4.2    | 4.6    | 4.9    | 4.7    | 4.5    | 4.2    | 4.0    | 3.8    | 17.8%  |
| Electric Vehicle                 | 0.2    | 0.3    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 4.8%   |
| Electric-Diesel Hybrid           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 82.4%  |
| CNG ICE                          | 5.3    | 10.7   | 12.9   | 12.8   | 13.1   | 13.5   | 13.8   | 13.9   | 13.9   | 14.0   | 14.0   | 14.2   | 14.1   | 14.1   | 14.3   | 14.8   | 14.8   | 14.5   | 14.3   | 14.2   | 14.1   | 14.2   | 4.6%   |
| CNG Bi-fuel                      | 1.9    | 2.3    | 2.6    | 2.8    | 2.9    | 2.9    | 2.8    | 2.7    | 2.4    | 2.2    | 2.1    | 2.0    | 1.8    | 1.7    | 1.7    | 1.7    | 1.5    | 1.4    | 1.3    | 1.2    | 1.1    | 1.1    | -2.6%  |
| LPG ICE                          | 2.8    | 4.6    | 5.3    | 5.3    | 5.4    | 5.6    | 5.8    | 5.9    | 5.9    | 6.0    | 6.0    | 6.0    | 6.0    | 5.9    | 6.0    | 6.1    | 6.1    | 6.0    | 5.8    | 5.7    | 5.7    | 5.7    | 3.3%   |
| LPG Bi-fuel                      | 1.2    | 1.4    | 1.6    | 1.7    | 1.8    | 1.8    | 1.7    | 1.6    | 1.4    | 1.2    | 1.1    | 1.0    | 0.9    | 0.8    | 0.7    | 0.7    | 0.6    | 0.6    | 0.5    | 0.5    | 0.4    | 0.4    | -5.1%  |
| Fuel Cell Gasoline               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Methanol               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Hydrogen               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Total Alternatives               | 56.4   | 84.0   | 96.3   | 104.2  | 109.2  | 106.9  | 107.4  | 105.7  | 100.9  | 97.6   | 97.5   | 94.9   | 91.0   | 88.2   | 87.8   | 88.4   | 87.8   | 89.7   | 86.9   | 84.6   | 83.1   | 81.8   | 1.7%   |
| Percent Alternative Car Sales    | 4.41   | 7.05   | 8.28   | 9.12   | 9.48   | 9.14   | 9.10   | 9.08   | 8.78   | 8.54   | 8.57   | 8.30   | 8.05   | 7.84   | 7.71   | 7.60   | 7.46   | 7.76   | 7.61   | 7.46   | 7.31   | 7.15   | 2.2%   |
| Total New Car Sales              | 1278.4 | 1191.0 | 1162.8 | 1142.4 | 1151.8 | 1169.5 | 1179.8 | 1164.4 | 1149.9 | 1142.4 | 1137.6 | 1143.5 | 1130.5 | 1124.7 | 1138.3 | 1163.3 | 1176.2 | 1157.2 | 1142.3 | 1134.9 | 1137.2 | 1144.8 | -0.5%  |
| <b>New Light-Truck Sales 2/</b>  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>Conventional Vehicles</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gasoline ICE Vehicles            | 1013.5 | 980.0  | 973.4  | 973.7  | 996.6  | 1026.7 | 1046.2 | 1057.9 | 1056.3 | 1057.9 | 1060.4 | 1071.8 | 1065.1 | 1063.5 | 1081.8 | 1110.8 | 1127.9 | 1114.2 | 1104.0 | 1100.5 | 1106.1 | 1116.6 | 0.4%   |
| TDI Diesel ICE                   | 0.5    | 1.5    | 2.4    | 3.8    | 6.1    | 10.4   | 16.7   | 4.8    | 7.1    | 10.4   | 13.8   | 17.1   | 19.4   | 21.1   | 22.3   | 23.2   | 23.6   | 23.2   | 22.7   | 22.3   | 22.1   | 22.0   | 18.4%  |
| Total Conventional               | 1014.1 | 981.4  | 975.8  | 977.5  | 1002.7 | 1037.0 | 1062.9 | 1062.7 | 1063.4 | 1068.2 | 1074.2 | 1088.9 | 1084.5 | 1084.6 | 1104.0 | 1134.0 | 1151.5 | 1137.4 | 1126.7 | 1122.8 | 1128.2 | 1138.6 | 0.5%   |
| <b>Alternative-Fuel Vehicles</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Methanol-Flex Fuel ICE           | 7.1    | 11.3   | 14.1   | 17.0   | 19.8   | 17.3   | 17.1   | 17.2   | 15.7   | 14.9   | 14.0   | 13.5   | 12.5   | 13.1   | 12.5   | 12.0   | 11.5   | 10.5   | 9.7    | 9.0    | 8.3    | 7.7    | 0.3%   |
| Methanol ICE                     | 0.9    | 2.4    | 3.4    | 3.4    | 3.5    | 3.7    | 3.8    | 3.8    | 3.9    | 3.9    | 4.0    | 4.2    | 4.2    | 4.2    | 4.3    | 4.4    | 4.5    | 4.4    | 4.3    | 4.3    | 4.2    | 4.2    | 7.1%   |
| Ethanol-Flex Fuel ICE            | 4.3    | 6.8    | 8.9    | 10.7   | 11.8   | 12.8   | 13.0   | 12.9   | 12.1   | 11.3   | 10.5   | 9.9    | 8.9    | 8.3    | 7.7    | 7.3    | 6.9    | 6.2    | 5.6    | 5.1    | 4.6    | 4.1    | -0.2%  |
| Ethanol ICE                      | 0.1    | 0.3    | 0.5    | 0.5    | 0.5    | 0.5    | 0.6    | 0.6    | 0.6    | 0.7    | 0.7    | 0.8    | 0.8    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.8    | 0.8    | 0.8    | 8.7%   |
| Electric Vehicle                 | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 4.4%   |
| Electric-Diesel Hybrid           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 89.1%  |
| CNG ICE                          | 3.4    | 8.2    | 11.0   | 11.1   | 11.4   | 11.8   | 12.1   | 12.1   | 12.1   | 12.1   | 12.1   | 12.3   | 12.2   | 12.2   | 12.4   | 12.7   | 12.9   | 12.7   | 12.6   | 12.5   | 12.6   | 12.7   | 6.1%   |
| CNG Bi-fuel                      | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -13.0% |
| LPG ICE                          | 1.8    | 3.2    | 4.1    | 4.1    | 4.2    | 4.3    | 4.4    | 4.4    | 4.4    | 4.4    | 4.5    | 4.5    | 4.5    | 4.5    | 4.6    | 4.7    | 4.7    | 4.7    | 4.6    | 4.6    | 4.6    | 4.7    | 4.3%   |
| LPG Bi-fuel                      | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -13.2% |
| Fuel Cell Gasoline               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Methanol               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Hydrogen               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Total Alternatives               | 17.9   | 32.6   | 42.2   | 47.1   | 51.6   | 50.6   | 51.2   | 51.2   | 49.0   | 47.5   | 46.1   | 45.3   | 43.4   | 43.4   | 42.6   | 42.3   | 41.7   | 39.6   | 37.9   | 36.5   | 35.3   | 34.3   | 3.0%   |

**Table 38. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
03 - East North Central**

1998-

|                                 | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| Percent Alternative LT. Sales   | 1.73   | 3.21   | 4.14   | 4.60   | 4.90   | 4.65   | 4.60   | 4.60   | 4.40   | 4.26   | 4.12   | 3.99   | 3.85   | 3.84   | 3.71   | 3.60   | 3.49   | 3.37   | 3.25   | 3.14   | 3.03   | 2.92   | 2.4% |
| Total New Truck Sales           | 1031.9 | 1014.0 | 1017.9 | 1024.6 | 1054.3 | 1087.6 | 1114.1 | 1113.9 | 1112.4 | 1115.8 | 1120.3 | 1134.2 | 1127.9 | 1127.9 | 1146.6 | 1176.3 | 1193.2 | 1177.1 | 1164.6 | 1159.2 | 1163.5 | 1172.9 | 0.6% |
| Percent Total Alternative Sales | 3.21   | 5.29   | 6.35   | 6.98   | 7.29   | 6.98   | 6.91   | 6.89   | 6.63   | 6.43   | 6.36   | 6.15   | 5.95   | 5.84   | 5.71   | 5.59   | 5.46   | 5.54   | 5.41   | 5.28   | 5.14   | 5.01   | 2.0% |
| EPACT Leg. Alternative Sales    | 13.42  | 29.93  | 38.19  | 37.96  | 38.64  | 39.49  | 40.13  | 39.86  | 39.59  | 39.52  | 39.52  | 39.87  | 39.54  | 39.44  | 40.01  | 40.97  | 41.49  | 40.88  | 40.40  | 40.18  | 40.29  | 40.59  | 5.2% |
| ZEVP Leg. Alternative Sales     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A  |
| Total Vehicles Sales            | 2310.3 | 2205.0 | 2180.8 | 2167.0 | 2206.1 | 2257.1 | 2293.9 | 2278.3 | 2262.3 | 2258.1 | 2257.9 | 2277.7 | 2258.4 | 2252.6 | 2284.9 | 2339.6 | 2369.4 | 2334.3 | 2306.9 | 2294.1 | 2300.6 | 2317.7 | 0.0% |

1/ Includes personal and fleet light-duty cars.  
2/ Includes personal and fleet light-duty trucks.

TDI = Turbo Direct Injection.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

LI = Light Truck.

Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 39. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)  
04 - West North Central**

1998-

|                               | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020   |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| New Car Sales 1/              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Conventional Vehicles         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles         | 507.3 | 463.0 | 447.1 | 435.9 | 438.0 | 446.1 | 449.2 | 444.7 | 439.5 | 436.5 | 433.5 | 435.9 | 431.3 | 429.2 | 434.6 | 444.3 | 450.1 | 442.0 | 437.4 | 435.8 | 437.7 | 441.9 | -0.6%  |
| TDI Diesel ICE                | 0.2   | 0.5   | 0.7   | 1.1   | 1.7   | 2.8   | 4.4   | 3.6   | 5.2   | 7.3   | 9.5   | 11.7  | 13.3  | 14.8  | 16.0  | 17.1  | 17.7  | 17.6  | 17.7  | 17.7  | 17.9  | 18.2  | 22.8%  |
| Total Conventional            | 507.5 | 463.5 | 447.8 | 437.0 | 439.6 | 448.9 | 453.6 | 448.3 | 444.8 | 443.8 | 443.0 | 447.6 | 444.6 | 444.0 | 450.6 | 461.4 | 467.8 | 459.6 | 455.1 | 453.5 | 455.7 | 460.0 | -0.4%  |
| Alternative-Fuel Vehicles     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE        | 10.6  | 15.3  | 17.6  | 19.4  | 20.5  | 18.6  | 18.1  | 17.4  | 15.8  | 14.6  | 13.4  | 12.4  | 11.3  | 10.6  | 10.3  | 10.1  | 9.9   | 11.2  | 10.9  | 10.7  | 10.6  | 10.5  | 0.0%   |
| Methanol ICE                  | 0.3   | 0.8   | 1.1   | 1.1   | 1.2   | 1.2   | 1.3   | 1.4   | 1.6   | 1.8   | 2.2   | 2.6   | 3.0   | 3.0   | 3.3   | 3.6   | 3.8   | 3.8   | 3.7   | 3.7   | 3.6   | 3.6   | 11.3%  |
| Ethanol-Flex Fuel ICE         | 6.9   | 9.7   | 10.7  | 11.9  | 12.6  | 13.0  | 12.9  | 12.4  | 11.5  | 10.6  | 10.7  | 9.8   | 8.7   | 8.1   | 7.7   | 7.5   | 7.3   | 7.1   | 6.9   | 6.6   | 6.5   | 6.3   | -0.4%  |
| Ethanol Ice                   | 0.0   | 0.1   | 0.2   | 0.2   | 0.2   | 0.3   | 0.5   | 0.7   | 0.9   | 1.3   | 1.7   | 2.1   | 2.5   | 3.0   | 3.4   | 3.7   | 3.8   | 3.7   | 3.5   | 3.3   | 3.1   | 2.9   | 20.7%  |
| Electric Vehicle              | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 4.6%   |
| Electric-Diesel Hybrid        | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 81.6%  |
| CNG ICE                       | 2.2   | 4.5   | 5.5   | 5.4   | 5.6   | 5.8   | 6.0   | 6.1   | 6.1   | 6.2   | 6.3   | 6.4   | 6.4   | 6.4   | 6.6   | 6.9   | 6.9   | 6.8   | 6.7   | 6.6   | 6.6   | 6.6   | 5.1%   |
| CNG Bi-fuel                   | 0.8   | 1.0   | 1.2   | 1.3   | 1.3   | 1.3   | 1.2   | 1.1   | 1.0   | 0.9   | 0.9   | 0.8   | 0.7   | 0.7   | 0.6   | 0.7   | 0.6   | 0.6   | 0.5   | 0.5   | 0.5   | 0.4   | -3.1%  |
| LPG ICE                       | 1.2   | 1.9   | 2.3   | 2.3   | 2.4   | 2.5   | 2.6   | 2.7   | 2.8   | 2.8   | 2.8   | 2.9   | 2.9   | 2.8   | 2.9   | 3.0   | 3.0   | 2.9   | 2.9   | 2.8   | 2.8   | 2.7   | 4.0%   |
| LPG Bi-fuel                   | 0.6   | 0.7   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.7   | 0.6   | 0.5   | 0.5   | 0.4   | 0.4   | 0.3   | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | -5.4%  |
| Fuel Cell Gasoline            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives            | 22.7  | 34.2  | 39.3  | 42.5  | 44.7  | 43.6  | 43.6  | 42.7  | 40.5  | 38.9  | 38.6  | 37.6  | 36.1  | 35.2  | 35.3  | 35.9  | 35.8  | 36.6  | 35.5  | 34.6  | 34.0  | 33.5  | 1.8%   |
| Percent Alternative Car Sales | 4.28  | 6.87  | 8.07  | 8.86  | 9.24  | 8.86  | 8.77  | 8.69  | 8.34  | 8.06  | 8.02  | 7.74  | 7.51  | 7.34  | 7.26  | 7.23  | 7.11  | 7.37  | 7.23  | 7.09  | 6.94  | 6.79  | 2.1%   |
| Total New Car Sales           | 530.2 | 497.7 | 487.1 | 479.5 | 484.4 | 492.5 | 497.2 | 490.9 | 485.2 | 482.7 | 481.6 | 485.2 | 480.7 | 479.2 | 485.9 | 497.3 | 503.6 | 496.2 | 490.6 | 488.1 | 489.7 | 493.6 | -0.3%  |
| New Light-Truck Sales 2/      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Conventional Vehicles         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles         | 420.5 | 409.7 | 408.0 | 409.0 | 419.4 | 432.8 | 441.5 | 446.5 | 446.2 | 447.6 | 449.6 | 455.4 | 453.5 | 453.7 | 462.3 | 475.4 | 483.4 | 478.2 | 474.5 | 473.7 | 476.7 | 481.8 | 0.6%   |
| TDI Diesel ICE                | 0.2   | 0.6   | 1.0   | 1.5   | 2.5   | 4.2   | 6.8   | 2.0   | 2.9   | 4.3   | 5.7   | 7.0   | 8.0   | 8.7   | 9.2   | 9.6   | 9.8   | 9.6   | 9.4   | 9.3   | 9.2   | 9.1   | 18.6%  |
| Total Conventional            | 420.8 | 410.3 | 409.0 | 410.6 | 421.9 | 437.0 | 448.3 | 448.5 | 449.2 | 451.8 | 455.2 | 462.4 | 461.5 | 462.4 | 471.5 | 485.0 | 493.2 | 487.8 | 484.0 | 483.0 | 485.9 | 491.0 | 0.7%   |
| Alternative-Fuel Vehicles     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE        | 2.9   | 4.8   | 6.0   | 7.3   | 8.4   | 7.3   | 7.2   | 7.3   | 6.6   | 6.2   | 5.9   | 5.6   | 5.2   | 5.5   | 5.3   | 5.1   | 4.9   | 4.5   | 4.2   | 3.9   | 3.6   | 3.4   | 0.7%   |
| Methanol Ice                  | 0.4   | 1.0   | 1.4   | 1.4   | 1.5   | 1.5   | 1.6   | 1.6   | 1.6   | 1.7   | 1.7   | 1.7   | 1.8   | 1.8   | 1.8   | 1.9   | 1.9   | 1.9   | 1.8   | 1.8   | 1.8   | 1.8   | 7.2%   |
| Ethanol-Flex Fuel ICE         | 1.7   | 2.6   | 3.4   | 4.1   | 4.7   | 5.0   | 5.1   | 5.0   | 4.6   | 4.3   | 4.0   | 3.7   | 3.4   | 3.1   | 2.9   | 2.8   | 2.6   | 2.4   | 2.2   | 2.0   | 1.8   | 1.6   | -0.4%  |
| Ethanol ICE                   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.3   | 0.3   | 0.4   | 0.4   | 0.5   | 0.5   | 0.5   | 0.6   | 0.6   | 0.6   | 0.5   | 0.5   | 0.5   | 0.5   | 0.4   | 10.1%  |
| Electric Vehicle              | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 4.6%   |
| Electric-Diesel Hybrid        | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 89.5%  |
| CNG ICE                       | 1.4   | 3.4   | 4.6   | 4.7   | 4.8   | 5.0   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.2   | 5.2   | 5.2   | 5.3   | 5.4   | 5.5   | 5.5   | 5.4   | 5.4   | 5.4   | 5.5   | 6.3%   |
| CNG Bi-fuel                   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -13.4% |
| LPG ICE                       | 0.8   | 1.4   | 1.7   | 1.7   | 1.8   | 1.8   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 4.5%   |
| LPG Bi-fuel                   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -13.5% |
| Fuel Cell Gasoline            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives            | 7.3   | 13.5  | 17.4  | 19.5  | 21.5  | 21.0  | 21.2  | 21.2  | 20.3  | 19.7  | 19.1  | 18.8  | 18.1  | 18.2  | 17.9  | 17.9  | 17.7  | 16.9  | 16.2  | 15.6  | 15.1  | 14.7  | 3.3%   |

**Table 39. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
04 - West North Central**

|                                 | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014   | 2015   | 2016   | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-----------|
| Percent Alternative LT. Sales   | 1.70  | 3.18  | 4.09  | 4.53  | 4.85  | 4.59  | 4.52  | 4.52  | 4.32  | 4.17  | 4.03  | 3.91  | 3.77  | 3.79  | 3.67  | 3.56   | 3.46   | 3.34   | 3.23  | 3.13  | 3.02  | 2.91  | 2.5%      |
| Total New Truck Sales           | 428.0 | 423.8 | 426.4 | 430.1 | 443.4 | 458.0 | 469.5 | 469.7 | 469.4 | 471.5 | 474.3 | 481.2 | 479.6 | 480.6 | 489.4 | 502.9  | 510.9  | 504.7  | 500.1 | 498.6 | 501.0 | 505.7 | 0.8%      |
| Percent Total Alternative Sales | 3.13  | 5.17  | 6.21  | 6.82  | 7.14  | 6.80  | 6.71  | 6.65  | 6.36  | 6.14  | 6.04  | 5.83  | 5.64  | 5.56  | 5.46  | 5.38   | 5.27   | 5.34   | 5.21  | 5.09  | 4.96  | 4.83  | 2.0%      |
| EPACT Leg. Alternative Sales    | 5.56  | 12.51 | 16.00 | 15.93 | 16.25 | 16.63 | 16.91 | 16.81 | 16.71 | 16.70 | 16.73 | 16.92 | 16.81 | 16.80 | 17.08 | 17.52  | 17.77  | 17.53  | 17.35 | 17.28 | 17.35 | 17.50 | 5.3%      |
| ZEVP Leg. Alternative Sales     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |
| Total Vehicles Sales            | 958.2 | 921.5 | 913.5 | 909.6 | 927.8 | 950.5 | 966.7 | 960.6 | 954.7 | 954.3 | 956.0 | 966.3 | 960.2 | 959.7 | 975.3 | 1000.2 | 1014.5 | 1000.9 | 990.7 | 986.6 | 990.7 | 999.3 | 0.2%      |

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

IDI = Turbo Direct Injection.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

LT = Light Truck.

Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see

EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.L100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.L100199A.

**Table 40. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)  
05 - South Atlantic**

1998-

|                                  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020   |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>New Car Sales 1/</b>          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>Conventional Vehicles</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gasoline ICE Vehicles            | 1378.5 | 1264.2 | 1225.0 | 1199.6 | 1211.0 | 1240.7 | 1256.7 | 1251.4 | 1244.3 | 1243.2 | 1242.8 | 1257.7 | 1252.8 | 1256.4 | 1282.1 | 1321.8 | 1349.6 | 1334.6 | 1331.3 | 1336.8 | 1353.7 | 1377.5 | 0.0%   |
| TDI Diesel ICE                   | 0.5    | 1.2    | 1.9    | 3.0    | 4.6    | 7.6    | 12.1   | 9.8    | 14.5   | 20.4   | 26.7   | 33.0   | 37.8   | 42.2   | 46.0   | 49.5   | 51.8   | 51.9   | 52.4   | 52.8   | 53.8   | 54.9   | 23.6%  |
| Total Conventional               | 1379.0 | 1265.5 | 1226.9 | 1202.6 | 1215.6 | 1248.3 | 1268.9 | 1261.2 | 1258.8 | 1263.6 | 1269.5 | 1290.7 | 1290.6 | 1298.6 | 1328.0 | 1371.2 | 1401.5 | 1386.5 | 1383.6 | 1389.6 | 1407.5 | 1432.4 | 0.2%   |
| <b>Alternative-Fuel Vehicles</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Methanol-Flex Fuel ICE           | 28.3   | 43.4   | 50.1   | 55.9   | 59.8   | 54.6   | 54.2   | 53.4   | 49.7   | 47.4   | 44.7   | 42.5   | 39.9   | 38.4   | 37.9   | 37.7   | 37.3   | 42.4   | 41.6   | 41.1   | 41.0   | 41.1   | 1.7%   |
| Methanol ICE                     | 0.9    | 2.2    | 2.9    | 3.0    | 3.2    | 3.4    | 3.7    | 4.1    | 4.6    | 5.5    | 6.8    | 8.5    | 10.1   | 10.3   | 11.4   | 12.6   | 13.5   | 13.7   | 13.6   | 13.5   | 13.4   | 13.3   | 12.9%  |
| Ethanol-Flex Fuel ICE            | 18.3   | 24.1   | 27.0   | 30.1   | 31.6   | 32.9   | 33.2   | 32.4   | 30.7   | 29.0   | 30.2   | 28.2   | 25.9   | 24.4   | 23.6   | 23.1   | 22.5   | 22.1   | 21.2   | 20.6   | 20.0   | 19.5   | 0.3%   |
| Ethanol Ice                      | 0.1    | 0.3    | 0.4    | 0.4    | 0.5    | 0.6    | 0.7    | 0.9    | 1.2    | 1.5    | 1.9    | 2.3    | 2.7    | 3.1    | 3.5    | 3.8    | 4.1    | 4.0    | 3.7    | 3.5    | 3.3    | 3.1    | 16.2%  |
| Electric Vehicle                 | 0.2    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.7    | 5.4%   |
| Electric-Diesel Hybrid           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 84.3%  |
| CNG ICE                          | 6.0    | 12.3   | 14.9   | 14.9   | 15.3   | 15.8   | 16.4   | 16.6   | 16.7   | 17.0   | 17.2   | 17.6   | 17.6   | 17.7   | 18.2   | 18.9   | 19.1   | 19.0   | 18.8   | 18.8   | 19.0   | 19.2   | 5.5%   |
| CNG Bi-fuel                      | 2.2    | 2.8    | 3.2    | 3.5    | 3.6    | 3.7    | 3.6    | 3.4    | 3.1    | 2.8    | 2.7    | 2.6    | 2.4    | 2.2    | 2.2    | 2.2    | 2.0    | 1.9    | 1.8    | 1.7    | 1.6    | 1.5    | -1.7%  |
| LPG ICE                          | 3.1    | 5.2    | 6.1    | 6.1    | 6.3    | 6.5    | 6.8    | 6.9    | 7.0    | 7.1    | 7.2    | 7.3    | 7.3    | 7.3    | 7.4    | 7.7    | 7.8    | 7.7    | 7.6    | 7.5    | 7.5    | 7.6    | 4.1%   |
| LPG Bi-fuel                      | 1.4    | 1.6    | 1.8    | 2.0    | 2.0    | 2.0    | 1.9    | 1.8    | 1.6    | 1.5    | 1.3    | 1.2    | 1.0    | 0.9    | 0.9    | 0.8    | 0.8    | 0.7    | 0.7    | 0.6    | 0.5    | 0.5    | -4.7%  |
| Fuel Cell Gasoline               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Methanol               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Hydrogen               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Total Alternatives               | 60.6   | 92.2   | 106.8  | 116.2  | 122.7  | 119.8  | 120.9  | 119.9  | 115.2  | 112.3  | 112.5  | 110.7  | 107.4  | 105.1  | 105.7  | 107.5  | 107.6  | 112.1  | 109.6  | 107.9  | 107.0  | 106.4  | 2.6%   |
| Percent Alternative Car Sales    | 4.21   | 6.79   | 8.01   | 8.81   | 9.17   | 8.76   | 8.70   | 8.68   | 8.38   | 8.16   | 8.14   | 7.90   | 7.68   | 7.49   | 7.37   | 7.27   | 7.13   | 7.48   | 7.34   | 7.20   | 7.06   | 6.92   | 2.3%   |
| Total New Car Sales              | 1439.6 | 1357.7 | 1333.7 | 1318.8 | 1338.3 | 1368.1 | 1389.8 | 1381.1 | 1374.0 | 1375.9 | 1382.0 | 1401.4 | 1397.9 | 1403.6 | 1433.7 | 1478.7 | 1509.1 | 1498.6 | 1493.2 | 1497.5 | 1514.5 | 1538.8 | 0.3%   |
| <b>New Light-Truck Sales 2/</b>  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>Conventional Vehicles</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gasoline ICE Vehicles            | 1142.1 | 1117.8 | 1117.5 | 1125.3 | 1159.4 | 1203.5 | 1235.4 | 1257.1 | 1264.6 | 1276.7 | 1290.9 | 1316.4 | 1319.9 | 1329.9 | 1365.1 | 1414.8 | 1449.9 | 1445.6 | 1445.7 | 1454.6 | 1475.7 | 1503.5 | 1.3%   |
| TDI Diesel ICE                   | 0.6    | 1.6    | 2.6    | 4.1    | 6.7    | 11.5   | 18.6   | 5.4    | 8.0    | 11.8   | 15.8   | 19.7   | 22.6   | 24.7   | 26.4   | 27.6   | 28.3   | 28.2   | 27.8   | 27.4   | 27.3   | 27.4   | 19.3%  |
| Total Conventional               | 1142.7 | 1119.4 | 1120.0 | 1129.5 | 1166.1 | 1215.0 | 1254.0 | 1262.4 | 1272.6 | 1288.5 | 1306.7 | 1336.1 | 1342.6 | 1354.6 | 1391.5 | 1442.4 | 1478.2 | 1473.8 | 1473.5 | 1482.0 | 1503.0 | 1530.9 | 1.3%   |
| <b>Alternative-Fuel Vehicles</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Methanol-Flex Fuel ICE           | 7.6    | 13.7   | 17.1   | 20.9   | 24.6   | 21.3   | 21.2   | 21.6   | 19.9   | 19.1   | 18.2   | 17.7   | 16.7   | 17.8   | 17.2   | 16.8   | 16.3   | 15.1   | 14.1   | 13.3   | 12.4   | 11.7   | 2.0%   |
| Methanol Ice                     | 1.1    | 2.8    | 3.9    | 4.0    | 4.1    | 4.3    | 4.5    | 4.5    | 4.6    | 4.8    | 4.9    | 5.1    | 5.2    | 5.3    | 5.5    | 5.7    | 5.8    | 5.7    | 5.7    | 5.6    | 5.7    | 5.7    | 8.0%   |
| Ethanol-Flex Fuel ICE            | 4.5    | 6.3    | 8.4    | 10.1   | 11.3   | 12.1   | 12.3   | 12.2   | 11.4   | 10.7   | 9.9    | 9.4    | 8.5    | 7.9    | 7.5    | 7.1    | 6.7    | 6.0    | 5.5    | 4.9    | 4.5    | 4.0    | -0.6%  |
| Ethanol ICE                      | 0.1    | 0.4    | 0.5    | 0.5    | 0.6    | 0.6    | 0.6    | 0.7    | 0.7    | 0.8    | 0.8    | 0.9    | 0.9    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 0.9    | 0.9    | 9.0%   |
| Electric Vehicle                 | 0.1    | 0.1    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 5.2%   |
| Electric-Diesel Hybrid           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 91.4%  |
| CNG ICE                          | 3.8    | 9.4    | 12.7   | 12.8   | 13.3   | 13.8   | 14.2   | 14.3   | 14.4   | 14.6   | 14.7   | 15.0   | 15.1   | 15.2   | 15.6   | 16.2   | 16.5   | 16.5   | 16.4   | 16.5   | 16.7   | 17.0   | 7.0%   |
| CNG Bi-fuel                      | 0.0    | 0.0    | 0.1    | 0.1    | 0.1    | 0.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -12.2% |
| LPG ICE                          | 2.1    | 3.7    | 4.7    | 4.7    | 4.9    | 5.1    | 5.2    | 5.3    | 5.3    | 5.4    | 5.4    | 5.5    | 5.6    | 5.6    | 5.7    | 5.9    | 6.1    | 6.1    | 6.0    | 6.1    | 6.1    | 6.3    | 5.2%   |
| LPG Bi-fuel                      | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -12.9% |
| Fuel Cell Gasoline               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Methanol               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Hydrogen               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Total Alternatives               | 19.4   | 36.5   | 47.5   | 53.3   | 59.0   | 57.4   | 58.4   | 58.8   | 56.6   | 55.4   | 54.3   | 53.9   | 52.2   | 53.1   | 52.7   | 52.9   | 52.6   | 50.6   | 48.9   | 47.6   | 46.6   | 45.8   | 4.0%   |

**Table 40. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
05 - South Atlantic**

|                                 | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Percent Alternative LT. Sales   | 1.67   | 3.16   | 4.07   | 4.51   | 4.81   | 4.51   | 4.45   | 4.45   | 4.26   | 4.12   | 3.99   | 3.88   | 3.74   | 3.77   | 3.65   | 3.54   | 3.44   | 3.32   | 3.21   | 3.11   | 3.01   | 2.90   | 2.6%      |
| Total New Truck Sales           | 1162.0 | 1155.9 | 1167.5 | 1182.8 | 1225.0 | 1272.4 | 1312.4 | 1321.3 | 1329.2 | 1343.9 | 1361.0 | 1390.0 | 1394.7 | 1407.7 | 1444.2 | 1495.3 | 1530.9 | 1524.4 | 1522.4 | 1529.6 | 1549.6 | 1576.6 | 1.4%      |
| Percent Total Alternative Sales | 3.07   | 5.12   | 6.17   | 6.77   | 7.09   | 6.71   | 6.64   | 6.61   | 6.35   | 6.17   | 6.08   | 5.89   | 5.71   | 5.63   | 5.50   | 5.39   | 5.27   | 5.38   | 5.26   | 5.14   | 5.01   | 4.89   | 2.1%      |
| EPACT Leg. Alternative Sales    | 15.11  | 34.12  | 43.80  | 43.82  | 44.90  | 46.20  | 47.28  | 47.28  | 47.30  | 47.60  | 48.01  | 48.86  | 48.89  | 49.22  | 50.39  | 52.08  | 53.24  | 52.94  | 52.81  | 53.01  | 53.66  | 54.56  | 6.0%      |
| Z EVP Leg. Alternative Sales    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Total Vehicles Sales            | 2601.6 | 2513.7 | 2501.3 | 2501.6 | 2563.3 | 2640.5 | 2702.2 | 2702.4 | 2703.2 | 2719.9 | 2743.0 | 2791.4 | 2792.7 | 2811.3 | 2877.9 | 2974.0 | 3040.0 | 3023.0 | 3015.6 | 3027.1 | 3064.1 | 3115.5 | 0.8%      |

1/ Includes personal and fleet light-duty cars.  
 2/ Includes personal and fleet light-duty trucks.  
 I DI = I turbo Direct Injection.  
 CNG = Compressed natural gas.  
 LPG = Liquid petroleum gas.  
 ICE = Internal combustion engine.  
 EPACT = Energy Policy Act of 1992.  
 Z EVP = Zero emission vehicles from the low emission vehicle program.  
 N/A = Not applicable.  
 L.I. = Light Truck.  
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 41. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)  
06 - East South Central**

1998-

|                                  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020   |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| <b>New Car Sales 1/</b>          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| <b>Conventional Vehicles</b>     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles            | 453.3 | 416.3 | 402.9 | 393.7 | 396.1 | 403.8 | 407.1 | 403.6 | 399.1 | 396.5 | 393.7 | 396.1 | 392.1 | 390.6 | 395.9 | 405.5 | 411.2 | 404.2 | 400.4 | 399.3 | 401.7 | 406.0 | -0.5%  |
| TDI Diesel ICE                   | 0.2   | 0.4   | 0.7   | 1.1   | 1.6   | 2.7   | 4.2   | 3.4   | 5.0   | 7.0   | 9.1   | 11.2  | 12.7  | 14.1  | 15.3  | 16.4  | 17.1  | 17.1  | 17.1  | 17.2  | 17.5  | 17.8  | 23.2%  |
| Total Conventional               | 453.4 | 416.7 | 403.6 | 394.7 | 397.6 | 406.5 | 411.4 | 407.0 | 404.1 | 403.5 | 402.8 | 407.3 | 404.9 | 404.7 | 411.3 | 421.9 | 428.3 | 421.2 | 417.6 | 416.5 | 419.2 | 423.8 | -0.3%  |
| <b>Alternative-Fuel Vehicles</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE           | 9.6   | 13.2  | 15.2  | 16.9  | 18.0  | 16.4  | 16.2  | 15.8  | 14.6  | 13.8  | 13.0  | 12.2  | 11.3  | 10.8  | 10.5  | 10.3  | 10.1  | 11.3  | 11.0  | 10.7  | 10.6  | 10.5  | 0.4%   |
| Methanol ICE                     | 0.3   | 0.7   | 1.0   | 1.0   | 1.0   | 1.1   | 1.2   | 1.3   | 1.4   | 1.6   | 2.0   | 2.4   | 2.8   | 2.9   | 3.1   | 3.4   | 3.6   | 3.6   | 3.5   | 3.5   | 3.4   | 3.3   | 11.5%  |
| Ethanol-Flex Fuel ICE            | 6.2   | 9.0   | 10.0  | 11.1  | 11.9  | 12.4  | 12.5  | 12.2  | 11.5  | 10.8  | 11.3  | 10.5  | 9.6   | 9.0   | 8.7   | 8.4   | 8.2   | 8.0   | 7.7   | 7.4   | 7.2   | 7.1   | 0.6%   |
| Ethanol Ice                      | 0.0   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.3   | 0.4   | 0.5   | 0.6   | 0.8   | 1.0   | 1.2   | 1.4   | 1.5   | 1.7   | 1.8   | 1.7   | 1.6   | 1.6   | 1.5   | 1.4   | 17.8%  |
| Electric Vehicle                 | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 5.0%   |
| Electric-Diesel Hybrid           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 83.1%  |
| CNG ICE                          | 2.0   | 4.0   | 4.9   | 4.9   | 5.0   | 5.1   | 5.3   | 5.3   | 5.4   | 5.4   | 5.5   | 5.5   | 5.5   | 5.5   | 5.6   | 5.8   | 5.8   | 5.7   | 5.6   | 5.6   | 5.6   | 5.6   | 4.9%   |
| CNG Bi-fuel                      | 0.7   | 0.9   | 1.0   | 1.1   | 1.1   | 1.1   | 1.1   | 1.0   | 1.0   | 0.9   | 0.8   | 0.8   | 0.7   | 0.7   | 0.7   | 0.7   | 0.6   | 0.6   | 0.5   | 0.5   | 0.4   | 0.4   | -2.1%  |
| LPG ICE                          | 1.0   | 1.7   | 2.0   | 2.0   | 2.1   | 2.2   | 2.3   | 2.3   | 2.3   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.5   | 2.5   | 2.4   | 2.4   | 2.3   | 2.3   | 2.3   | 3.7%   |
| LPG Bi-fuel                      | 0.5   | 0.6   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.6   | 0.5   | 0.5   | 0.4   | 0.4   | 0.3   | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | -4.9%  |
| Fuel Cell Gasoline               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives               | 20.4  | 30.4  | 35.0  | 37.9  | 40.1  | 39.4  | 39.6  | 39.1  | 37.4  | 36.2  | 36.3  | 35.4  | 34.0  | 33.1  | 33.0  | 33.3  | 33.0  | 33.8  | 32.8  | 32.0  | 31.5  | 31.0  | 1.9%   |
| Percent Alternative Car Sales    | 4.30  | 6.79  | 7.97  | 8.76  | 9.16  | 8.83  | 8.79  | 8.76  | 8.47  | 8.24  | 8.27  | 8.00  | 7.75  | 7.55  | 7.42  | 7.31  | 7.16  | 7.43  | 7.28  | 7.13  | 6.98  | 6.82  | 2.1%   |
| Total New Car Sales              | 473.8 | 447.1 | 438.6 | 432.6 | 437.7 | 445.8 | 451.0 | 446.1 | 441.5 | 439.7 | 439.1 | 442.7 | 438.9 | 437.8 | 444.2 | 455.1 | 461.4 | 455.1 | 450.3 | 448.5 | 450.6 | 454.8 | -0.2%  |
| <b>New Light-Truck Sales 2/</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| <b>Conventional Vehicles</b>     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles            | 375.8 | 368.2 | 367.5 | 369.3 | 379.3 | 391.8 | 400.2 | 405.8 | 406.0 | 407.6 | 409.6 | 415.2 | 413.7 | 414.1 | 422.3 | 434.7 | 442.5 | 438.2 | 435.2 | 434.9 | 438.3 | 443.5 | 0.8%   |
| TDI Diesel ICE                   | 0.2   | 0.6   | 0.9   | 1.5   | 2.4   | 4.1   | 6.6   | 1.9   | 2.9   | 4.2   | 5.6   | 6.9   | 7.9   | 8.6   | 9.1   | 9.5   | 9.7   | 9.6   | 9.4   | 9.3   | 9.2   | 9.2   | 19.0%  |
| Total Conventional               | 376.0 | 368.8 | 368.5 | 370.8 | 381.6 | 395.9 | 406.8 | 407.7 | 408.8 | 411.7 | 415.2 | 422.1 | 421.5 | 422.7 | 431.4 | 444.2 | 452.2 | 447.8 | 444.6 | 444.2 | 447.5 | 452.8 | 0.8%   |
| <b>Alternative-Fuel Vehicles</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE           | 2.6   | 4.0   | 5.0   | 6.1   | 7.1   | 6.2   | 6.1   | 6.2   | 5.7   | 5.4   | 5.1   | 4.9   | 4.5   | 4.7   | 4.5   | 4.3   | 4.2   | 3.8   | 3.5   | 3.2   | 3.0   | 2.8   | 0.3%   |
| Methanol Ice                     | 0.3   | 0.9   | 1.3   | 1.3   | 1.3   | 1.4   | 1.4   | 1.5   | 1.5   | 1.5   | 1.5   | 1.6   | 1.6   | 1.6   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 7.4%   |
| Ethanol-Flex Fuel ICE            | 1.5   | 2.4   | 3.2   | 3.8   | 4.4   | 4.7   | 4.8   | 4.8   | 4.5   | 4.2   | 3.9   | 3.7   | 3.3   | 3.1   | 2.9   | 2.7   | 2.6   | 2.3   | 2.1   | 1.9   | 1.7   | 1.6   | 0.0%   |
| Ethanol ICE                      | 0.0   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.4   | 0.4   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 8.9%   |
| Electric Vehicle                 | 0.0   | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 4.7%   |
| Electric-Diesel Hybrid           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 89.9%  |
| CNG ICE                          | 1.3   | 3.1   | 4.2   | 4.2   | 4.3   | 4.5   | 4.6   | 4.6   | 4.6   | 4.7   | 4.7   | 4.8   | 4.7   | 4.8   | 4.8   | 5.0   | 5.1   | 5.0   | 5.0   | 4.9   | 5.0   | 5.0   | 6.5%   |
| CNG Bi-fuel                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -12.5% |
| LPG ICE                          | 0.7   | 1.2   | 1.5   | 1.5   | 1.6   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.8   | 1.8   | 1.9   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 4.6%   |
| LPG Bi-fuel                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -13.0% |
| Fuel Cell Gasoline               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives               | 6.5   | 11.9  | 15.4  | 17.3  | 19.0  | 18.8  | 19.0  | 19.1  | 18.3  | 17.8  | 17.3  | 17.0  | 16.3  | 16.4  | 16.1  | 16.0  | 15.8  | 15.1  | 14.5  | 14.0  | 13.6  | 13.2  | 3.3%   |

**Table 41. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
06 - East South Central**

|                                 | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-<br>2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| Percent Alternative LT. Sales   | 1.70  | 3.12  | 4.02  | 4.45  | 4.75  | 4.52  | 4.47  | 4.47  | 4.28  | 4.14  | 4.00  | 3.88  | 3.73  | 3.73  | 3.60  | 3.49  | 3.38  | 3.27  | 3.16  | 3.05  | 2.94  | 2.84  | 2.4%          |
| Total New Truck Sales           | 382.5 | 380.6 | 383.9 | 388.0 | 400.7 | 414.6 | 425.9 | 426.7 | 427.1 | 429.5 | 432.5 | 439.1 | 437.9 | 439.1 | 447.5 | 460.2 | 468.0 | 462.9 | 459.1 | 458.2 | 461.0 | 466.0 | 0.9%          |
| Percent Total Alternative Sales | 3.13  | 5.10  | 6.13  | 6.72  | 7.05  | 6.76  | 6.69  | 6.66  | 6.41  | 6.21  | 6.15  | 5.95  | 5.75  | 5.64  | 5.50  | 5.39  | 5.26  | 5.33  | 5.20  | 5.07  | 4.94  | 4.81  | 2.0%          |
| EPACT Leg. Alternative Sales    | 4.97  | 11.24 | 14.40 | 14.38 | 14.69 | 15.06 | 15.34 | 15.27 | 15.20 | 15.21 | 15.26 | 15.44 | 15.35 | 15.35 | 15.61 | 16.03 | 16.28 | 16.08 | 15.93 | 15.88 | 15.97 | 16.13 | 5.5%          |
| Z EVP Leg. Alternative Sales    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Total Vehicles Sales            | 856.3 | 827.7 | 822.5 | 820.6 | 838.4 | 860.5 | 876.8 | 872.8 | 868.6 | 869.2 | 871.6 | 881.8 | 876.8 | 876.9 | 891.7 | 915.4 | 929.4 | 917.9 | 909.4 | 906.7 | 911.7 | 920.8 | 0.3%          |

1/ Includes personal and fleet light-duty cars.  
 2/ Includes personal and fleet light-duty trucks.  
 I DI = I turbo Direct Injection.  
 CNG = Compressed natural gas.  
 LPG = Liquid petroleum gas.  
 ICE = Internal combustion engine.  
 EPACT = Energy Policy Act of 1992.  
 Z EVP = Zero emission vehicles from the low emission vehicle program.  
 N/A = Not applicable.  
 L.T. = Light Truck.  
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 42. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)  
07 - West South Central**

1998-

|                               | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020   |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| New Car Sales 1/              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Conventional Vehicles         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles         | 801.4 | 737.4 | 714.6 | 699.3 | 705.2 | 720.6 | 728.6 | 724.5 | 718.6 | 716.0 | 713.5 | 719.8 | 714.8 | 714.0 | 725.9 | 745.4 | 758.4 | 747.8 | 743.2 | 743.4 | 750.0 | 760.3 | -0.2%  |
| TDI Diesel ICE                | 0.3   | 0.8   | 1.2   | 1.9   | 2.9   | 4.8   | 7.7   | 6.2   | 9.1   | 12.8  | 16.7  | 20.6  | 23.5  | 26.2  | 28.5  | 30.7  | 32.1  | 32.1  | 32.3  | 32.6  | 33.2  | 33.9  | 23.8%  |
| Total Conventional            | 801.7 | 738.2 | 715.8 | 701.2 | 708.0 | 725.4 | 736.2 | 730.7 | 727.7 | 728.7 | 730.1 | 740.4 | 738.3 | 740.2 | 754.5 | 776.1 | 790.5 | 779.9 | 775.5 | 776.0 | 783.2 | 794.2 | 0.0%   |
| Alternative-Fuel Vehicles     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE        | 16.6  | 22.4  | 25.7  | 28.5  | 30.2  | 27.3  | 26.6  | 25.8  | 23.6  | 22.2  | 20.8  | 19.7  | 18.3  | 17.6  | 17.2  | 17.2  | 17.0  | 19.3  | 18.8  | 18.5  | 18.3  | 18.3  | 0.5%   |
| Methanol ICE                  | 0.5   | 1.2   | 1.7   | 1.7   | 1.8   | 1.9   | 2.0   | 2.1   | 2.3   | 2.6   | 3.1   | 3.7   | 4.2   | 4.2   | 4.5   | 4.9   | 5.1   | 5.1   | 5.1   | 5.0   | 5.0   | 4.9   | 10.6%  |
| Ethanol-Flex Fuel ICE         | 10.7  | 14.2  | 15.8  | 17.5  | 18.2  | 18.8  | 18.7  | 18.0  | 16.9  | 15.8  | 16.3  | 15.2  | 13.9  | 13.1  | 12.7  | 12.4  | 12.1  | 12.0  | 11.5  | 11.2  | 10.9  | 10.7  | 0.0%   |
| Ethanol Ice                   | 0.1   | 0.2   | 0.2   | 0.2   | 0.3   | 0.3   | 0.4   | 0.5   | 0.7   | 0.9   | 1.1   | 1.3   | 1.5   | 1.8   | 2.0   | 2.2   | 2.3   | 2.3   | 2.2   | 2.1   | 1.9   | 1.8   | 16.3%  |
| Electric Vehicle              | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 5.2%   |
| Electric-Diesel Hybrid        | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 83.6%  |
| CNG ICE                       | 3.5   | 7.2   | 8.7   | 8.7   | 9.0   | 9.4   | 9.8   | 10.0  | 10.1  | 10.3  | 10.5  | 10.8  | 10.9  | 11.0  | 11.4  | 12.0  | 12.0  | 11.9  | 11.7  | 11.6  | 11.7  | 11.7  | 5.7%   |
| CNG Bi-fuel                   | 1.4   | 1.7   | 2.0   | 2.1   | 2.2   | 2.2   | 2.1   | 1.9   | 1.7   | 1.6   | 1.5   | 1.4   | 1.3   | 1.2   | 1.2   | 1.2   | 1.1   | 1.1   | 1.0   | 0.9   | 0.9   | 0.8   | -2.4%  |
| LPG ICE                       | 1.8   | 3.1   | 3.7   | 3.7   | 4.0   | 4.3   | 4.6   | 4.9   | 5.2   | 5.4   | 5.6   | 5.8   | 5.8   | 5.9   | 6.0   | 6.1   | 6.1   | 6.0   | 5.8   | 5.7   | 5.6   | 5.5   | 5.1%   |
| LPG Bi-fuel                   | 0.8   | 1.1   | 1.3   | 1.3   | 1.3   | 1.3   | 1.2   | 1.0   | 0.9   | 0.8   | 0.7   | 0.7   | 0.6   | 0.6   | 0.6   | 0.5   | 0.5   | 0.5   | 0.4   | 0.4   | 0.4   | 0.3   | -3.8%  |
| Fuel Cell Gasoline            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives            | 35.5  | 51.3  | 59.2  | 64.1  | 67.3  | 65.7  | 65.8  | 64.7  | 61.8  | 60.0  | 60.1  | 59.0  | 57.0  | 55.7  | 55.9  | 56.9  | 56.7  | 58.3  | 56.8  | 55.6  | 55.0  | 54.5  | 2.0%   |
| Percent Alternative Car Sales | 4.24  | 6.50  | 7.64  | 8.38  | 8.68  | 8.30  | 8.21  | 8.14  | 7.83  | 7.61  | 7.61  | 7.38  | 7.16  | 7.00  | 6.90  | 6.83  | 6.69  | 6.96  | 6.82  | 6.69  | 6.56  | 6.42  | 1.9%   |
| Total New Car Sales           | 837.2 | 789.5 | 775.0 | 765.3 | 775.3 | 791.1 | 802.1 | 795.5 | 789.5 | 788.7 | 790.3 | 799.4 | 795.3 | 796.0 | 810.4 | 833.0 | 847.1 | 838.3 | 832.3 | 831.7 | 838.2 | 848.7 | 0.1%   |
| New Light-Truck Sales 2/      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Conventional Vehicles         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles         | 664.1 | 650.8 | 650.3 | 654.1 | 672.9 | 696.5 | 713.1 | 725.0 | 727.4 | 732.3 | 738.4 | 750.7 | 750.5 | 753.8 | 771.1 | 796.4 | 813.2 | 807.8 | 804.9 | 806.9 | 815.6 | 828.0 | 1.0%   |
| TDI Diesel ICE                | 0.3   | 1.0   | 1.6   | 2.6   | 4.3   | 7.4   | 11.9  | 3.5   | 5.2   | 7.6   | 10.2  | 12.7  | 14.6  | 15.9  | 16.9  | 17.7  | 18.1  | 18.0  | 17.8  | 17.6  | 17.5  | 17.6  | 19.6%  |
| Total Conventional            | 664.5 | 651.9 | 651.9 | 656.8 | 677.2 | 703.8 | 725.0 | 728.5 | 732.6 | 739.9 | 748.6 | 763.5 | 765.1 | 769.7 | 788.1 | 814.1 | 831.3 | 825.8 | 822.7 | 824.4 | 833.1 | 845.6 | 1.1%   |
| Alternative-Fuel Vehicles     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE        | 4.5   | 7.0   | 8.7   | 10.6  | 12.4  | 10.8  | 10.6  | 10.8  | 9.9   | 9.4   | 8.9   | 8.5   | 8.0   | 8.4   | 8.0   | 7.8   | 7.5   | 6.9   | 6.4   | 5.9   | 5.5   | 5.1   | 0.6%   |
| Methanol Ice                  | 0.6   | 1.6   | 2.3   | 2.3   | 2.4   | 2.5   | 2.6   | 2.6   | 2.6   | 2.7   | 2.8   | 2.8   | 2.9   | 2.9   | 3.0   | 3.1   | 3.1   | 3.1   | 3.0   | 3.0   | 3.0   | 3.1   | 7.6%   |
| Ethanol-Flex Fuel ICE         | 2.7   | 3.8   | 5.0   | 6.1   | 6.8   | 7.3   | 7.4   | 7.3   | 6.8   | 6.4   | 5.9   | 5.6   | 5.1   | 4.7   | 4.4   | 4.2   | 3.9   | 3.6   | 3.2   | 2.9   | 2.6   | 2.3   | -0.6%  |
| Ethanol ICE                   | 0.1   | 0.2   | 0.3   | 0.3   | 0.3   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.5   | 0.5   | 0.5   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.5   | 0.5   | 0.5   | 8.9%   |
| Electric Vehicle              | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 5.0%   |
| Electric-Diesel Hybrid        | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 91.3%  |
| CNG ICE                       | 2.2   | 5.4   | 7.4   | 7.4   | 7.7   | 8.0   | 8.2   | 8.3   | 8.3   | 8.4   | 8.4   | 8.6   | 8.6   | 8.6   | 8.8   | 9.1   | 9.3   | 9.2   | 9.2   | 9.2   | 9.3   | 9.4   | 6.7%   |
| CNG Bi-fuel                   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -12.4% |
| LPG ICE                       | 1.2   | 2.2   | 2.7   | 2.7   | 2.8   | 2.9   | 3.0   | 3.0   | 3.1   | 3.1   | 3.1   | 3.2   | 3.2   | 3.2   | 3.3   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.5   | 4.9%   |
| LPG Bi-fuel                   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -12.0% |
| Fuel Cell Gasoline            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives            | 11.3  | 20.4  | 26.5  | 29.6  | 32.6  | 31.9  | 32.4  | 32.5  | 31.2  | 30.5  | 29.7  | 29.4  | 28.4  | 28.6  | 28.2  | 28.2  | 28.0  | 26.8  | 25.9  | 25.1  | 24.5  | 23.9  | 3.5%   |

**Table 42. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
07 - West South Central**

|                                 | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Percent Alternative LT. Sales   | 1.68   | 3.03   | 3.91   | 4.31   | 4.59   | 4.34   | 4.27   | 4.27   | 4.09   | 3.96   | 3.82   | 3.71   | 3.57   | 3.58   | 3.46   | 3.35   | 3.26   | 3.15   | 3.05   | 2.95   | 2.85   | 2.75   | 2.3%      |
| Total New Truck Sales           | 675.8  | 672.2  | 678.4  | 686.4  | 709.7  | 735.8  | 757.4  | 761.0  | 763.8  | 770.4  | 778.3  | 792.8  | 793.4  | 798.3  | 816.3  | 842.3  | 859.3  | 852.7  | 848.5  | 849.5  | 857.6  | 869.5  | 1.2%      |
| Percent Total Alternative Sales | 3.10   | 4.90   | 5.90   | 6.46   | 6.72   | 6.39   | 6.30   | 6.25   | 5.99   | 5.80   | 5.73   | 5.55   | 5.37   | 5.29   | 5.17   | 5.08   | 4.96   | 5.04   | 4.92   | 4.80   | 4.68   | 4.56   | 1.8%      |
| EPACT Leg. Alternative Sales    | 8.79   | 19.84  | 25.45  | 25.43  | 26.01  | 26.72  | 27.28  | 27.23  | 27.18  | 27.29  | 27.46  | 27.87  | 27.81  | 27.91  | 28.48  | 29.34  | 29.88  | 29.61  | 29.44  | 29.44  | 29.70  | 30.09  | 5.8%      |
| Z EVP Leg. Alternative Sales    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Total Vehicles Sales            | 1513.0 | 1461.7 | 1453.5 | 1451.7 | 1485.1 | 1526.9 | 1559.4 | 1556.4 | 1553.4 | 1559.1 | 1568.6 | 1592.2 | 1588.7 | 1594.3 | 1626.7 | 1675.4 | 1706.4 | 1690.9 | 1680.8 | 1681.2 | 1695.7 | 1718.2 | 0.6%      |

1/ Includes personal and fleet light-duty cars.  
 2/ Includes personal and fleet light-duty trucks.  
 I DI = I turbo Direct Injection.  
 CNG = Compressed natural gas.  
 LPG = Liquid petroleum gas.  
 ICE = Internal combustion engine.  
 EPAC I = Energy Policy Act of 1992.  
 Z EVP = Zero emission vehicles from the low emission vehicle program.  
 N/A = Not applicable.  
 L I . = Light Truck.  
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 43. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)**  
**08 - Mountain**

1998-

|                                  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020   |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| <b>New Car Sales 1/</b>          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| <b>Conventional Vehicles</b>     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles            | 443.8 | 421.1 | 415.7 | 412.2 | 421.4 | 435.3 | 444.3 | 445.3 | 445.0 | 446.4 | 447.7 | 454.0 | 452.4 | 453.4 | 462.8 | 477.6 | 489.4 | 486.9 | 488.3 | 493.7 | 504.2 | 518.1 | 0.7%   |
| TDI Diesel ICE                   | 0.2   | 0.5   | 0.7   | 1.1   | 1.8   | 3.0   | 4.8   | 3.9   | 5.8   | 8.2   | 10.8  | 13.4  | 15.3  | 17.1  | 18.7  | 20.2  | 21.3  | 21.5  | 21.9  | 22.3  | 23.1  | 23.9  | 24.7%  |
| Total Conventional               | 444.0 | 421.6 | 416.4 | 413.4 | 423.2 | 438.3 | 449.1 | 449.2 | 450.8 | 454.6 | 458.4 | 467.4 | 467.7 | 470.5 | 481.5 | 497.8 | 510.7 | 508.4 | 510.2 | 516.0 | 527.3 | 542.0 | 0.9%   |
| <b>Alternative-Fuel Vehicles</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE           | 10.0  | 13.6  | 16.0  | 18.0  | 19.4  | 17.7  | 17.5  | 17.0  | 15.6  | 14.7  | 13.6  | 12.6  | 11.6  | 11.0  | 10.6  | 10.4  | 10.2  | 11.7  | 11.5  | 11.5  | 11.5  | 11.7  | 0.7%   |
| Methanol ICE                     | 0.3   | 0.7   | 1.0   | 1.0   | 1.1   | 1.2   | 1.4   | 1.6   | 1.8   | 2.2   | 2.8   | 3.6   | 4.3   | 4.4   | 5.0   | 5.6   | 6.0   | 6.1   | 6.1   | 6.1   | 6.1   | 6.1   | 14.6%  |
| Ethanol-Flex Fuel ICE            | 6.5   | 8.3   | 9.4   | 10.6  | 11.2  | 11.7  | 11.8  | 11.4  | 10.7  | 9.9   | 10.2  | 9.3   | 8.3   | 7.8   | 7.4   | 7.1   | 6.9   | 6.9   | 6.7   | 6.5   | 6.4   | 6.4   | -0.1%  |
| Ethanol Ice                      | 0.0   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.3   | 0.4   | 0.6   | 0.7   | 1.0   | 1.2   | 1.4   | 1.7   | 1.9   | 2.2   | 2.3   | 2.3   | 2.2   | 2.1   | 2.0   | 1.9   | 19.1%  |
| Electric Vehicle                 | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 5.8%   |
| Electric-Diesel Hybrid           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 84.0%  |
| CNG ICE                          | 1.9   | 4.1   | 5.1   | 5.2   | 5.4   | 5.7   | 6.0   | 6.2   | 6.3   | 6.5   | 6.6   | 6.8   | 6.9   | 6.9   | 7.2   | 7.6   | 7.7   | 7.6   | 7.6   | 7.7   | 7.8   | 8.0   | 6.6%   |
| CNG Bi-fuel                      | 0.8   | 1.0   | 1.2   | 1.3   | 1.3   | 1.3   | 1.3   | 1.2   | 1.1   | 1.0   | 0.9   | 0.9   | 0.8   | 0.7   | 0.7   | 0.7   | 0.7   | 0.6   | 0.6   | 0.6   | 0.5   | 0.5   | -1.7%  |
| LPG ICE                          | 1.0   | 1.8   | 2.1   | 2.2   | 2.3   | 2.5   | 2.6   | 2.8   | 2.9   | 3.0   | 3.1   | 3.1   | 3.1   | 3.1   | 3.2   | 3.3   | 3.4   | 3.4   | 3.3   | 3.3   | 3.3   | 3.3   | 5.5%   |
| LPG Bi-fuel                      | 0.5   | 0.6   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.7   | 0.6   | 0.5   | 0.5   | 0.4   | 0.4   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | -4.0%  |
| Fuel Cell Gasoline               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives               | 21.1  | 30.4  | 35.8  | 39.4  | 41.9  | 41.3  | 41.9  | 41.5  | 39.8  | 38.7  | 38.8  | 38.1  | 37.0  | 36.2  | 36.5  | 37.5  | 37.7  | 39.1  | 38.5  | 38.1  | 38.1  | 38.3  | 2.7%   |
| Percent Alternative Car Sales    | 4.53  | 6.73  | 7.92  | 8.69  | 9.01  | 8.62  | 8.53  | 8.45  | 8.11  | 7.85  | 7.80  | 7.54  | 7.33  | 7.14  | 7.05  | 7.00  | 6.88  | 7.14  | 7.01  | 6.88  | 6.74  | 6.60  | 1.7%   |
| Total New Car Sales              | 465.1 | 452.0 | 452.2 | 452.7 | 465.1 | 479.7 | 490.9 | 490.7 | 490.6 | 493.3 | 497.2 | 505.5 | 504.8 | 506.7 | 518.0 | 535.3 | 548.5 | 547.5 | 548.7 | 554.1 | 565.4 | 580.3 | 1.0%   |
| <b>New Light-Truck Sales 2/</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| <b>Conventional Vehicles</b>     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Gasoline ICE Vehicles            | 368.5 | 372.2 | 379.0 | 386.3 | 402.9 | 421.6 | 435.6 | 446.6 | 451.3 | 457.4 | 463.9 | 474.0 | 475.6 | 479.0 | 492.0 | 510.9 | 525.5 | 526.7 | 529.7 | 536.7 | 549.2 | 565.1 | 2.0%   |
| TDI Diesel ICE                   | 0.2   | 0.6   | 1.0   | 1.6   | 2.7   | 4.6   | 7.5   | 2.2   | 3.3   | 4.9   | 6.6   | 8.3   | 9.5   | 10.4  | 11.2  | 11.8  | 12.1  | 12.2  | 12.1  | 12.1  | 12.3  | 12.5  | 20.5%  |
| Total Conventional               | 368.7 | 372.8 | 380.0 | 388.0 | 405.6 | 426.2 | 443.2 | 448.8 | 454.7 | 462.3 | 470.5 | 482.3 | 485.2 | 489.4 | 503.2 | 522.6 | 537.7 | 538.8 | 541.8 | 548.8 | 561.5 | 577.6 | 2.1%   |
| <b>Alternative-Fuel Vehicles</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| Methanol-Flex Fuel ICE           | 2.7   | 4.3   | 5.5   | 6.7   | 8.0   | 7.0   | 7.0   | 7.1   | 6.6   | 6.3   | 6.0   | 5.8   | 5.4   | 5.7   | 5.5   | 5.4   | 5.2   | 4.9   | 4.6   | 4.3   | 4.1   | 3.8   | 1.6%   |
| Methanol Ice                     | 0.3   | 0.9   | 1.3   | 1.4   | 1.4   | 1.5   | 1.6   | 1.6   | 1.7   | 1.7   | 1.8   | 1.9   | 1.9   | 2.0   | 2.1   | 2.1   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 8.9%   |
| Ethanol-Flex Fuel ICE            | 1.6   | 2.2   | 3.0   | 3.7   | 4.1   | 4.5   | 4.6   | 4.6   | 4.3   | 4.0   | 3.7   | 3.5   | 3.2   | 2.9   | 2.8   | 2.6   | 2.5   | 2.3   | 2.1   | 1.9   | 1.7   | 1.6   | -0.2%  |
| Ethanol ICE                      | 0.0   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.3   | 0.3   | 0.3   | 0.3   | 0.4   | 0.4   | 0.4   | 0.4   | 0.5   | 0.5   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 10.4%  |
| Electric Vehicle                 | 0.0   | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 6.0%   |
| Electric-Diesel Hybrid           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 92.7%  |
| CNG ICE                          | 1.2   | 3.1   | 4.3   | 4.4   | 4.6   | 4.8   | 5.0   | 5.1   | 5.1   | 5.2   | 5.3   | 5.4   | 5.5   | 5.5   | 5.6   | 5.9   | 6.0   | 6.0   | 6.0   | 6.1   | 6.2   | 6.4   | 7.8%   |
| CNG Bi-fuel                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -12.2% |
| LPG ICE                          | 0.7   | 1.2   | 1.6   | 1.6   | 1.7   | 1.8   | 1.9   | 1.9   | 1.9   | 1.9   | 2.0   | 2.0   | 2.0   | 2.0   | 2.1   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 2.3   | 2.4   | 5.9%   |
| LPG Bi-fuel                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -12.3% |
| Fuel Cell Gasoline               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Methanol               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Fuel Cell Hydrogen               | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A    |
| Total Alternatives               | 6.7   | 12.0  | 15.9  | 18.1  | 20.2  | 19.9  | 20.4  | 20.6  | 19.9  | 19.6  | 19.2  | 19.0  | 18.4  | 18.7  | 18.6  | 18.7  | 18.7  | 18.1  | 17.6  | 17.2  | 17.0  | 16.9  | 4.3%   |

**Table 43. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
08 - Mountain**

|                                 | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Percent Alternative LT. Sales   | 1.78  | 3.12  | 4.02  | 4.45  | 4.74  | 4.47  | 4.40  | 4.40  | 4.20  | 4.06  | 3.92  | 3.80   | 3.66   | 3.68   | 3.56   | 3.45   | 3.36   | 3.25   | 3.14   | 3.04   | 2.94   | 2.84   | 2.1%      |
| Total New Truck Sales           | 375.4 | 384.8 | 395.9 | 406.0 | 425.8 | 446.1 | 463.6 | 469.4 | 474.6 | 481.9 | 489.7 | 501.4  | 503.6  | 508.1  | 521.8  | 541.3  | 556.4  | 556.9  | 559.4  | 566.0  | 578.5  | 594.5  | 2.1%      |
| Percent Total Alternative Sales | 3.30  | 5.07  | 6.10  | 6.69  | 6.97  | 6.62  | 6.52  | 6.47  | 6.19  | 5.98  | 5.88  | 5.68   | 5.50   | 5.41   | 5.30   | 5.22   | 5.11   | 5.18   | 5.06   | 4.94   | 4.82   | 4.70   | 1.6%      |
| EPACT Leg. Alternative Sales    | 4.88  | 11.36 | 14.85 | 15.04 | 15.60 | 16.20 | 16.70 | 16.80 | 16.89 | 17.07 | 17.28 | 17.63  | 17.65  | 17.77  | 18.21  | 18.86  | 19.35  | 19.34  | 19.41  | 19.62  | 20.03  | 20.57  | 6.8%      |
| Z EVP Leg. Alternative Sales    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Total Vehicles Sales            | 840.5 | 836.9 | 848.1 | 858.8 | 890.9 | 925.8 | 954.5 | 960.2 | 965.2 | 975.2 | 987.0 | 1006.8 | 1008.3 | 1014.8 | 1039.8 | 1076.7 | 1104.8 | 1104.4 | 1108.1 | 1120.1 | 1143.8 | 1174.8 | 1.5%      |

1/ Includes personal and fleet light-duty cars.  
 2/ Includes personal and fleet light-duty trucks.  
 I DI = I turbo Direct Injection.  
 CNG = Compressed natural gas.  
 LPG = Liquid petroleum gas.  
 ICE = Internal combustion engine.  
 EPACT = Energy Policy Act of 1992.  
 Z EVP = Zero emission vehicles from the low emission vehicle program.  
 N/A = Not applicable.  
 L.I. = Light Truck.  
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 44. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)  
09 - Pacific**

1998-

|                                  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020   |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>New Car Sales 1/</b>          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>Conventional Vehicles</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gasoline ICE Vehicles            | 1164.8 | 1063.3 | 1022.5 | 994.6  | 940.2  | 947.9  | 951.9  | 943.9  | 932.4  | 926.2  | 920.0  | 923.9  | 911.4  | 907.9  | 918.6  | 939.2  | 952.3  | 936.6  | 928.8  | 926.8  | 933.9  | 945.3  | -0.9%  |
| TDI Diesel ICE                   | 0.5    | 1.1    | 1.7    | 2.7    | 4.2    | 7.0    | 11.8   | 9.5    | 13.7   | 19.5   | 25.2   | 31.1   | 36.0   | 40.3   | 44.0   | 47.4   | 50.5   | 50.7   | 51.4   | 53.0   | 54.2   | 56.0   | 24.2%  |
| Total Conventional               | 1165.3 | 1064.4 | 1024.2 | 997.2  | 944.4  | 954.9  | 963.7  | 953.4  | 946.1  | 945.7  | 945.2  | 955.0  | 947.4  | 948.2  | 962.6  | 986.6  | 1002.8 | 987.2  | 980.3  | 979.8  | 988.2  | 1001.3 | -0.7%  |
| <b>Alternative-Fuel Vehicles</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Methanol-Flex Fuel ICE           | 26.4   | 31.2   | 37.3   | 41.3   | 45.0   | 47.8   | 47.2   | 45.1   | 41.8   | 38.2   | 34.5   | 31.6   | 29.0   | 27.5   | 26.9   | 27.0   | 26.9   | 30.4   | 29.8   | 29.6   | 29.6   | 29.8   | 0.5%   |
| Methanol ICE                     | 0.8    | 1.9    | 2.5    | 2.6    | 2.9    | 3.4    | 4.0    | 5.0    | 6.3    | 8.3    | 11.2   | 15.0   | 19.0   | 19.5   | 22.2   | 24.9   | 26.1   | 26.6   | 26.5   | 26.5   | 26.5   | 26.6   | 17.2%  |
| Ethanol-Flex Fuel ICE            | 17.1   | 23.0   | 25.5   | 28.1   | 27.3   | 28.7   | 28.9   | 27.3   | 25.1   | 22.7   | 22.5   | 20.3   | 18.2   | 16.9   | 16.2   | 15.9   | 15.6   | 15.2   | 14.7   | 14.2   | 13.9   | 13.6   | -1.0%  |
| Ethanol Ice                      | 0.1    | 0.2    | 0.4    | 0.4    | 0.5    | 0.6    | 0.8    | 1.1    | 1.4    | 1.8    | 2.3    | 2.9    | 3.4    | 4.0    | 4.7    | 5.3    | 5.7    | 5.6    | 5.3    | 5.0    | 4.7    | 4.4    | 18.6%  |
| Electric Vehicle                 | 0.2    | 0.3    | 0.3    | 0.3    | 58.3   | 59.7   | 60.8   | 60.5   | 60.2   | 60.3   | 60.5   | 61.2   | 60.9   | 61.0   | 62.1   | 63.8   | 64.9   | 64.2   | 63.7   | 63.7   | 64.2   | 64.9   | 31.0%  |
| Electric-Diesel Hybrid           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 83.2%  |
| CNG ICE                          | 5.1    | 10.4   | 12.5   | 12.4   | 12.8   | 13.3   | 13.9   | 14.2   | 14.4   | 14.5   | 14.8   | 15.1   | 15.1   | 15.3   | 15.8   | 16.7   | 16.7   | 16.5   | 16.3   | 16.3   | 16.3   | 16.5   | 5.5%   |
| CNG Bi-fuel                      | 2.0    | 2.4    | 2.8    | 3.0    | 3.1    | 3.1    | 3.0    | 2.8    | 2.4    | 2.2    | 2.0    | 1.9    | 1.7    | 1.6    | 1.6    | 1.6    | 1.5    | 1.4    | 1.3    | 1.2    | 1.2    | 1.1    | -2.7%  |
| LPG ICE                          | 2.7    | 4.5    | 5.3    | 5.3    | 5.6    | 6.1    | 6.6    | 7.0    | 7.3    | 7.5    | 7.6    | 7.8    | 7.8    | 7.8    | 7.9    | 8.1    | 8.0    | 7.9    | 7.7    | 7.5    | 7.4    | 7.3    | 4.6%   |
| LPG Bi-fuel                      | 1.4    | 1.6    | 1.8    | 1.9    | 1.9    | 1.9    | 1.9    | 1.7    | 1.5    | 1.3    | 1.1    | 0.9    | 0.8    | 0.7    | 0.7    | 0.6    | 0.6    | 0.6    | 0.5    | 0.5    | 0.4    | 0.4    | -5.3%  |
| Fuel Cell Gasoline               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Methanol               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Hydrogen               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Total Alternatives               | 55.8   | 75.5   | 88.4   | 95.5   | 157.4  | 164.7  | 167.2  | 164.6  | 160.4  | 156.8  | 156.6  | 156.7  | 155.9  | 154.2  | 158.0  | 163.9  | 166.0  | 168.3  | 165.9  | 164.4  | 164.2  | 164.7  | 5.0%   |
| Percent Alternative Car Sales    | 4.57   | 6.62   | 7.95   | 8.74   | 14.29  | 14.71  | 14.79  | 14.72  | 14.50  | 14.22  | 14.21  | 14.09  | 14.13  | 13.99  | 14.10  | 14.25  | 14.20  | 14.56  | 14.48  | 14.37  | 14.25  | 14.12  | 5.3%   |
| Total New Car Sales              | 1221.1 | 1139.9 | 1112.6 | 1092.7 | 1101.8 | 1119.6 | 1130.9 | 1118.0 | 1106.5 | 1102.5 | 1101.8 | 1111.6 | 1103.3 | 1102.4 | 1120.6 | 1150.5 | 1168.8 | 1155.5 | 1146.2 | 1144.3 | 1152.4 | 1166.0 | -0.2%  |
| <b>New Light-Truck Sales 2/</b>  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>Conventional Vehicles</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gasoline ICE Vehicles            | 967.4  | 939.5  | 932.5  | 932.6  | 954.3  | 979.1  | 996.5  | 1011.4 | 1011.3 | 1015.0 | 1020.7 | 1034.9 | 1031.2 | 1032.7 | 1054.5 | 1087.5 | 1108.5 | 1100.2 | 1095.1 | 1096.2 | 1107.4 | 1123.1 | 0.7%   |
| TDI Diesel ICE                   | 0.5    | 1.4    | 2.3    | 3.7    | 6.3    | 11.1   | 19.1   | 5.5    | 8.1    | 12.1   | 15.9   | 19.8   | 23.3   | 25.6   | 27.5   | 29.0   | 30.6   | 30.6   | 30.6   | 31.2   | 31.3   | 32.2   | 20.6%  |
| Total Conventional               | 967.9  | 940.9  | 934.8  | 936.3  | 960.7  | 990.2  | 1015.6 | 1016.9 | 1019.4 | 1027.1 | 1036.6 | 1054.7 | 1054.5 | 1058.3 | 1082.0 | 1116.5 | 1139.2 | 1130.8 | 1125.7 | 1127.4 | 1138.7 | 1155.3 | 0.8%   |
| <b>Alternative-Fuel Vehicles</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Methanol-Flex Fuel ICE           | 7.2    | 9.5    | 12.5   | 15.2   | 18.6   | 20.1   | 20.3   | 20.6   | 19.7   | 18.8   | 17.8   | 17.3   | 16.3   | 17.5   | 16.9   | 16.6   | 16.2   | 15.1   | 14.2   | 13.4   | 12.6   | 12.0   | 2.3%   |
| Methanol Ice                     | 0.9    | 2.3    | 3.3    | 3.3    | 3.4    | 3.6    | 3.7    | 3.9    | 4.0    | 4.2    | 4.5    | 4.7    | 4.9    | 5.1    | 5.3    | 5.4    | 5.5    | 5.4    | 5.2    | 5.2    | 5.1    | 5.0    | 8.2%   |
| Ethanol-Flex Fuel ICE            | 4.3    | 6.3    | 8.3    | 9.9    | 10.2   | 11.2   | 11.6   | 11.4   | 10.6   | 9.8    | 9.1    | 8.5    | 7.7    | 7.2    | 6.7    | 6.4    | 6.1    | 5.5    | 5.0    | 4.5    | 4.1    | 3.7    | -0.7%  |
| Ethanol ICE                      | 0.1    | 0.3    | 0.4    | 0.5    | 0.5    | 0.5    | 0.6    | 0.6    | 0.6    | 0.7    | 0.8    | 0.8    | 0.9    | 0.9    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 0.9    | 0.9    | 0.9    | 9.4%   |
| Electric Vehicle                 | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 4.7%   |
| Electric-Diesel Hybrid           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 93.5%  |
| CNG ICE                          | 3.3    | 7.9    | 10.6   | 10.6   | 10.9   | 11.3   | 11.6   | 11.6   | 11.6   | 11.7   | 11.8   | 11.9   | 11.9   | 12.0   | 12.2   | 12.6   | 12.8   | 12.7   | 12.6   | 12.6   | 12.7   | 12.9   | 6.5%   |
| CNG Bi-fuel                      | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -13.1% |
| LPG ICE                          | 1.8    | 3.1    | 3.9    | 3.9    | 4.0    | 4.2    | 4.3    | 4.3    | 4.3    | 4.3    | 4.3    | 4.4    | 4.4    | 4.4    | 4.5    | 4.6    | 4.7    | 4.7    | 4.6    | 4.6    | 4.7    | 4.7    | 4.6%   |
| LPG Bi-fuel                      | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -13.5% |
| Fuel Cell Gasoline               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Methanol               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Hydrogen               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Total Alternatives               | 17.7   | 29.6   | 39.2   | 43.7   | 47.9   | 51.1   | 52.3   | 52.6   | 51.1   | 49.8   | 48.4   | 47.8   | 46.3   | 47.2   | 46.8   | 46.9   | 46.5   | 44.6   | 42.9   | 41.4   | 40.3   | 39.4   | 3.7%   |

**Table 44. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)**  
**09 - Pacific**

|                                 | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Percent Alternative LT. Sales   | 1.80   | 3.05   | 4.02   | 4.46   | 4.75   | 4.91   | 4.90   | 4.92   | 4.77   | 4.62   | 4.46   | 4.34   | 4.20   | 4.27   | 4.15   | 4.03   | 3.92   | 3.79   | 3.67   | 3.55   | 3.42   | 3.29   | 2.8%      |
| Total New Truck Sales           | 985.6  | 970.5  | 974.0  | 980.0  | 1008.6 | 1041.3 | 1067.9 | 1069.5 | 1070.5 | 1076.9 | 1085.1 | 1102.5 | 1100.8 | 1105.5 | 1128.8 | 1163.4 | 1185.7 | 1175.4 | 1168.6 | 1168.9 | 1179.0 | 1194.7 | 0.9%      |
| Percent Total Alternative Sales | 3.33   | 4.98   | 6.12   | 6.71   | 7.73   | 9.99   | 9.98   | 9.93   | 9.72   | 9.48   | 9.38   | 9.24   | 9.17   | 9.12   | 9.11   | 9.03   | 9.13   | 9.02   | 8.90   | 8.77   | 8.64   | 8.64   | 4.4%      |
| EPACT Leg. Alternative Sales    | 12.81  | 28.65  | 36.54  | 36.31  | 36.97  | 37.81  | 38.47  | 38.27  | 38.10  | 38.14  | 38.28  | 38.76  | 38.59  | 38.66  | 39.39  | 40.52  | 41.23  | 40.82  | 40.54  | 40.51  | 40.83  | 41.34  | 5.5%      |
| Z EVP Leg. Alternative Sales    | 0.00   | 0.00   | 0.00   | 0.00   | 144.92 | 148.39 | 151.10 | 150.38 | 149.69 | 149.85 | 150.35 | 152.20 | 151.45 | 151.62 | 154.38 | 158.70 | 161.37 | 159.66 | 158.48 | 158.30 | 159.49 | 161.44 | N/A       |
| Total Vehicles Sales            | 2206.7 | 2110.4 | 2086.6 | 2072.7 | 2110.4 | 2160.9 | 2198.9 | 2187.5 | 2177.0 | 2179.5 | 2186.9 | 2214.2 | 2204.1 | 2207.9 | 2249.4 | 2313.9 | 2354.5 | 2330.9 | 2314.7 | 2313.1 | 2331.4 | 2360.7 | 0.3%      |

1/ Includes personal and fleet light-duty cars.  
 2/ Includes personal and fleet light-duty trucks.  
 I DI = I turbo Direct Injection.  
 CNG = Compressed natural gas.  
 LPG = Liquid petroleum gas.  
 ICE = Internal combustion engine.  
 EPACT = Energy Policy Act of 1992.  
 Z EVP = Zero emission vehicles from the low emission vehicle program.  
 N/A = Not applicable.  
 L I. = Light Truck.  
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 45. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)  
United States Total**

1998-

|                                  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020   |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>New Car Sales 1/</b>          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>Conventional Vehicles</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gasoline ICE Vehicles            | 7401.6 | 6774.7 | 6545.6 | 6388.2 | 6328.8 | 6436.0 | 6487.0 | 6433.9 | 6365.2 | 6328.6 | 6291.9 | 6332.1 | 6269.7 | 6250.8 | 6340.3 | 6497.7 | 6597.4 | 6493.4 | 6443.9 | 6437.6 | 6488.6 | 6572.3 | -0.5%  |
| TDI Diesel ICE                   | 2.9    | 6.9    | 10.7   | 16.7   | 25.4   | 42.3   | 67.8   | 54.7   | 80.0   | 112.4  | 146.2  | 180.3  | 205.7  | 228.9  | 248.5  | 266.4  | 279.5  | 278.9  | 280.7  | 283.7  | 288.8  | 294.7  | 23.4%  |
| Total Conventional               | 7404.5 | 6781.5 | 6556.3 | 6404.9 | 6354.2 | 6478.3 | 6554.8 | 6488.6 | 6445.2 | 6441.0 | 6438.1 | 6512.4 | 6475.4 | 6479.7 | 6588.8 | 6764.1 | 6876.9 | 6772.2 | 6724.6 | 6721.3 | 6777.4 | 6867.1 | -0.3%  |
| <b>Alternative-Fuel Vehicles</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Methanol-Flex Fuel ICE           | 159.0  | 211.8  | 245.3  | 272.1  | 289.9  | 277.5  | 274.9  | 267.3  | 248.0  | 232.7  | 215.9  | 202.2  | 187.2  | 178.4  | 173.9  | 172.2  | 169.6  | 191.4  | 186.5  | 183.4  | 182.1  | 181.6  | 0.6%   |
| Methanol ICE                     | 5.0    | 11.6   | 15.5   | 15.9   | 17.0   | 18.3   | 20.4   | 23.2   | 26.7   | 32.5   | 40.9   | 51.8   | 62.6   | 63.8   | 71.2   | 78.6   | 83.3   | 84.1   | 83.2   | 82.3   | 81.7   | 81.2   | 13.5%  |
| Ethanol-Flex Fuel ICE            | 102.8  | 138.2  | 153.5  | 170.5  | 176.4  | 184.1  | 184.8  | 178.4  | 167.4  | 155.9  | 159.9  | 147.5  | 133.8  | 125.1  | 120.0  | 117.1  | 113.6  | 111.0  | 106.6  | 103.1  | 100.4  | 98.0   | -0.2%  |
| Ethanol Ice                      | 0.6    | 1.5    | 2.1    | 2.4    | 2.8    | 3.4    | 4.5    | 5.8    | 7.6    | 10.0   | 12.7   | 15.7   | 18.4   | 21.5   | 24.1   | 26.7   | 28.2   | 27.4   | 26.0   | 24.5   | 23.0   | 21.6   | 17.4%  |
| Electric Vehicle                 | 1.1    | 2.0    | 2.2    | 2.2    | 101.3  | 103.7  | 105.5  | 105.0  | 104.5  | 104.6  | 104.9  | 106.2  | 105.8  | 105.9  | 107.9  | 111.1  | 113.0  | 111.8  | 111.0  | 110.9  | 111.7  | 113.1  | 23.5%  |
| Electric-Diesel Hybrid           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 83.1%  |
| CNG ICE                          | 32.2   | 65.7   | 79.5   | 79.2   | 81.3   | 84.2   | 87.1   | 88.0   | 88.8   | 89.7   | 90.8   | 92.5   | 92.2   | 92.7   | 95.1   | 99.1   | 99.5   | 98.2   | 96.9   | 96.4   | 96.7   | 97.5   | 5.2%   |
| CNG Bi-fuel                      | 12.0   | 14.6   | 16.8   | 18.2   | 19.0   | 19.1   | 18.5   | 17.1   | 15.4   | 14.1   | 13.5   | 12.5   | 11.3   | 10.7   | 10.4   | 10.6   | 9.6    | 9.0    | 8.4    | 7.9    | 7.4    | 7.0    | -2.4%  |
| LPG ICE                          | 17.0   | 28.3   | 32.8   | 33.0   | 34.3   | 36.1   | 38.1   | 39.3   | 40.3   | 41.1   | 41.6   | 42.2   | 42.0   | 42.0   | 42.6   | 43.6   | 43.9   | 43.0   | 42.1   | 41.4   | 41.0   | 40.9   | 4.1%   |
| LPG Bi-fuel                      | 7.9    | 9.4    | 10.7   | 11.4   | 11.4   | 11.5   | 11.1   | 10.2   | 9.1    | 8.0    | 7.1    | 6.3    | 5.5    | 5.0    | 4.6    | 4.4    | 4.1    | 3.8    | 3.5    | 3.2    | 2.9    | 2.6    | -4.9%  |
| Fuel Cell Gasoline               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Methanol               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Hydrogen               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Total Alternatives               | 337.6  | 483.1  | 558.6  | 605.0  | 733.3  | 737.9  | 745.0  | 734.3  | 707.9  | 688.5  | 687.4  | 676.9  | 658.8  | 645.0  | 650.0  | 663.3  | 664.6  | 679.8  | 664.2  | 652.9  | 646.9  | 643.4  | 3.0%   |
| Percent Alternative Car Sales    | 4.36   | 6.65   | 7.85   | 8.63   | 10.35  | 10.23  | 10.21  | 10.17  | 9.90   | 9.66   | 9.65   | 9.42   | 9.23   | 9.05   | 8.98   | 8.93   | 8.81   | 9.12   | 8.99   | 8.85   | 8.71   | 8.57   | 3.1%   |
| Total New Car Sales              | 7742.1 | 7264.7 | 7115.0 | 7009.9 | 7087.5 | 7216.1 | 7299.7 | 7222.8 | 7153.1 | 7129.5 | 7125.5 | 7189.3 | 7134.2 | 7124.7 | 7238.8 | 7427.4 | 7541.5 | 7452.0 | 7388.8 | 7374.3 | 7424.3 | 7510.5 | -0.1%  |
| <b>New Light-Truck Sales 2/</b>  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>Conventional Vehicles</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Gasoline ICE Vehicles            | 6138.7 | 5986.2 | 5966.1 | 5987.0 | 6146.3 | 6341.2 | 6476.6 | 6567.6 | 6574.6 | 6604.7 | 6644.2 | 6739.6 | 6720.8 | 6734.0 | 6875.3 | 7087.7 | 7225.5 | 7168.4 | 7133.4 | 7141.9 | 7212.4 | 7315.3 | 0.8%   |
| TDI Diesel ICE                   | 3.2    | 8.9    | 14.4   | 23.1   | 37.8   | 64.8   | 105.8  | 30.6   | 45.4   | 66.7   | 88.7   | 110.3  | 126.6  | 138.1  | 146.7  | 153.5  | 158.0  | 156.4  | 154.3  | 153.2  | 152.5  | 153.9  | 19.3%  |
| Total Conventional               | 6141.9 | 5995.1 | 5980.5 | 6010.1 | 6184.1 | 6405.9 | 6582.4 | 6598.2 | 6620.0 | 6671.4 | 6732.9 | 6849.9 | 6847.5 | 6872.1 | 7022.0 | 7241.3 | 7383.5 | 7324.8 | 7287.6 | 7295.2 | 7364.9 | 7469.2 | 0.9%   |
| <b>Alternative-Fuel Vehicles</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Methanol-Flex Fuel ICE           | 42.8   | 65.1   | 82.1   | 99.5   | 116.8  | 108.8  | 108.9  | 110.2  | 102.5  | 97.5   | 92.2   | 88.9   | 83.2   | 88.2   | 84.6   | 82.3   | 79.4   | 73.3   | 68.2   | 63.7   | 59.4   | 55.5   | 1.2%   |
| Methanol Ice                     | 5.7    | 14.8   | 20.8   | 21.1   | 21.9   | 22.7   | 23.6   | 24.0   | 24.4   | 25.1   | 25.9   | 27.0   | 27.4   | 27.9   | 28.7   | 29.6   | 30.1   | 29.5   | 29.0   | 28.7   | 28.6   | 28.6   | 7.6%   |
| Ethanol-Flex Fuel ICE            | 25.6   | 36.9   | 48.4   | 58.6   | 64.3   | 69.6   | 71.0   | 70.0   | 65.3   | 60.9   | 56.4   | 52.8   | 47.9   | 44.5   | 41.6   | 39.4   | 37.2   | 33.6   | 30.3   | 27.4   | 24.7   | 22.1   | -0.7%  |
| Ethanol ICE                      | 0.7    | 2.0    | 2.8    | 2.9    | 3.0    | 3.2    | 3.5    | 3.7    | 3.9    | 4.3    | 4.6    | 5.0    | 5.3    | 5.5    | 5.7    | 5.9    | 5.9    | 5.7    | 5.5    | 5.3    | 5.1    | 4.9    | 9.0%   |
| Electric Vehicle                 | 0.4    | 0.7    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.1    | 1.0    | 1.0    | 1.0    | 1.0    | 1.1    | 4.8%   |
| Electric-Diesel Hybrid           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 91.0%  |
| CNG ICE                          | 20.7   | 50.1   | 67.6   | 68.2   | 70.4   | 72.8   | 74.7   | 74.9   | 75.0   | 75.5   | 76.0   | 77.2   | 77.1   | 77.3   | 78.9   | 81.2   | 82.7   | 81.9   | 81.4   | 81.4   | 82.0   | 83.1   | 6.5%   |
| CNG Bi-fuel                      | 0.2    | 0.2    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    | 0.2    | 0.2    | 0.2    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -12.8% |
| LPG ICE                          | 11.1   | 19.8   | 24.8   | 25.1   | 25.9   | 26.8   | 27.5   | 27.6   | 27.6   | 27.8   | 28.0   | 28.4   | 28.4   | 28.5   | 29.0   | 29.9   | 30.4   | 30.1   | 29.9   | 29.9   | 30.2   | 30.5   | 4.7%   |
| LPG Bi-fuel                      | 0.2    | 0.2    | 0.3    | 0.3    | 0.3    | 0.3    | 0.2    | 0.2    | 0.2    | 0.2    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | -13.1% |
| Fuel Cell Gasoline               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Methanol               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Fuel Cell Hydrogen               | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A    |
| Total Alternatives               | 107.4  | 190.0  | 247.9  | 276.8  | 303.8  | 305.4  | 310.6  | 311.7  | 300.2  | 292.3  | 284.5  | 280.6  | 270.4  | 273.1  | 269.7  | 269.4  | 266.9  | 255.4  | 245.5  | 237.4  | 231.1  | 225.9  | 3.4%   |

**Table 45. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)  
United States Total**

|                                 | 1998    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 1998-<br>2020 |
|---------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
| Percent Alternative LT. Sales   | 1.72    | 3.07    | 3.98    | 4.40    | 4.68    | 4.55    | 4.51    | 4.51    | 4.34    | 4.20    | 4.05    | 3.94    | 3.80    | 3.82    | 3.70    | 3.59    | 3.49    | 3.37    | 3.26    | 3.15    | 3.04    | 2.94    | 2.5%          |
| Total New Truck Sales           | 6249.3  | 6185.1  | 6228.4  | 6286.9  | 6487.9  | 6711.3  | 6893.0  | 6909.9  | 6920.2  | 6963.7  | 7017.4  | 7130.5  | 7117.8  | 7145.2  | 7291.8  | 7510.7  | 7650.4  | 7580.2  | 7533.1  | 7532.6  | 7596.1  | 7695.1  | 1.0%          |
| Percent Total Alternative Sales | 3.18    | 5.00    | 6.04    | 6.63    | 7.64    | 7.49    | 7.44    | 7.40    | 7.16    | 6.96    | 6.87    | 6.69    | 6.52    | 6.43    | 6.33    | 6.24    | 6.13    | 6.22    | 6.10    | 5.97    | 5.85    | 5.72    | 2.7%          |
| EPACT Leg. Alternative Sales    | 81.25   | 182.58  | 233.67  | 232.94  | 237.79  | 243.69  | 248.31  | 247.28  | 246.27  | 246.64  | 247.55  | 250.68  | 249.51  | 249.85  | 254.44  | 261.60  | 266.05  | 263.26  | 261.34  | 261.07  | 263.05  | 266.28  | 5.5%          |
| ZEV Leg. Alternative Sales      | 0.00    | 0.00    | 0.00    | 0.00    | 247.62  | 253.49  | 258.05  | 256.78  | 255.55  | 255.79  | 256.61  | 259.74  | 258.44  | 258.71  | 263.39  | 270.75  | 275.30  | 272.37  | 270.34  | 270.03  | 272.05  | 275.38  | N/A           |
| Total Vehicles Sales            | 13991.4 | 13449.7 | 13343.3 | 13296.8 | 13575.4 | 13927.4 | 14192.7 | 14132.7 | 14073.3 | 14093.1 | 14142.9 | 14319.8 | 14252.0 | 14269.9 | 14530.6 | 14938.1 | 15191.9 | 15032.2 | 14921.9 | 14906.9 | 15020.3 | 15205.6 | 0.4%          |

1/ Includes personal and fleet light-duty cars.  
2/ Includes personal and fleet light-duty trucks.

LDI = Turbo Direct Injection.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEV = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

LI = Light Truck.

Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.



**Table 46. Light-Duty Vehicle Stock by Technology Type (Millions) (2 of 2)**

|                             | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Fuel Cell Technology</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Fuel Cell Gasoline          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Fuel Cell Methanol          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Fuel Cell Hydrogen          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Total Alternatives          | 0.34   | 0.66   | 0.89   | 1.16   | 1.44   | 1.73   | 2.01   | 2.29   | 2.55   | 2.79   | 3.02   | 3.22   | 3.40   | 3.57   | 3.73   | 3.87   | 3.99   | 4.09   | 4.16   | 4.22   | 4.27   | 4.30   | 12.2%     |
| <b>Total Truck Stock</b>    | 66.07  | 73.05  | 76.21  | 79.30  | 82.44  | 85.66  | 88.92  | 92.03  | 94.96  | 97.76  | 100.44 | 103.06 | 105.49 | 107.79 | 110.08 | 112.43 | 114.78 | 116.91 | 118.85 | 120.66 | 122.41 | 124.13 | 2.9%      |
| <b>Total Vehicle Stock</b>  | 188.33 | 192.37 | 193.58 | 194.65 | 195.93 | 197.56 | 199.43 | 201.23 | 202.92 | 204.59 | 206.30 | 208.13 | 209.83 | 211.49 | 213.35 | 215.55 | 217.92 | 220.05 | 221.98 | 223.80 | 225.64 | 227.57 | 0.9%      |

1/ Includes personal and fleet vehicles.

IDI = Turbo Direct Injection.

ICE = Internal combustion engine.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy Information Administration (EIA), Household Vehicles Energy Consumption 1994, DOE/EIA-0464(94) (Washington, D.C., August 1997); EIA, Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); Federal Highway Administration, Highway Statistics 1997, (Washington DC, November 1998); R.L. Polk and Company, Transportation Energy Data Book: Edition 18, "Automobiles in Operation and Vehicle Travel by Age in 1996" and "Trucking Operation and Vehicle Travel by Age in 1995", US Department of Energy, ORNL-6941, (Oak Ridge, TN., September 1998); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 47. Light-Duty Vehicle MPG by Technology Type (MPG Gasoline Equivalents) (1 of 2)

1998-

|                           | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020 |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Automobiles 1/            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Conventional Vehicles     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Gasoline ICE Vehicles     | 28.10 | 28.77 | 28.80 | 29.00 | 29.77 | 29.75 | 29.84 | 30.05 | 30.29 | 30.52 | 30.73 | 30.94 | 31.20 | 31.25 | 31.25 | 31.22 | 31.17 | 31.16 | 31.16 | 31.15 | 31.12 | 31.09 | 0.5% |
| TDI Diesel ICE            | 38.32 | 39.10 | 39.14 | 39.31 | 39.84 | 39.76 | 39.87 | 39.84 | 40.05 | 40.27 | 40.52 | 40.70 | 40.95 | 41.09 | 41.05 | 40.95 | 40.84 | 40.78 | 40.74 | 40.68 | 40.61 | 40.53 | 0.3% |
| Alternative-Fuel Vehicles |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Alcohol Fuel Technology   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Methanol-Flex Fuel ICE    | 30.18 | 30.89 | 30.87 | 31.03 | 31.75 | 31.69 | 31.77 | 31.96 | 32.18 | 32.39 | 32.55 | 32.71 | 32.92 | 32.94 | 32.92 | 32.84 | 32.77 | 32.51 | 32.48 | 32.44 | 32.39 | 32.32 | 0.3% |
| Methanol ICE              | 29.93 | 30.38 | 30.40 | 30.70 | 31.51 | 31.59 | 31.89 | 32.33 | 32.79 | 33.26 | 33.64 | 33.92 | 34.22 | 34.28 | 34.28 | 34.22 | 34.16 | 34.11 | 34.09 | 34.05 | 33.99 | 33.93 | 0.6% |
| Ethanol-Flex Fuel ICE     | 29.81 | 30.47 | 30.58 | 30.74 | 31.47 | 31.41 | 31.49 | 31.67 | 31.89 | 32.10 | 32.09 | 32.26 | 32.49 | 32.53 | 32.52 | 32.47 | 32.41 | 32.35 | 32.33 | 32.30 | 32.25 | 32.19 | 0.4% |
| Ethanol Ice               | 29.00 | 29.42 | 29.50 | 29.95 | 30.89 | 31.14 | 31.53 | 31.97 | 32.39 | 32.75 | 33.03 | 33.25 | 33.51 | 33.56 | 33.53 | 33.45 | 33.37 | 33.32 | 33.31 | 33.28 | 33.24 | 33.19 | 0.6% |
| Natural Gas Technology    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| CNG ICE                   | 29.72 | 30.12 | 30.13 | 30.28 | 30.77 | 30.71 | 30.84 | 31.03 | 31.22 | 31.41 | 31.65 | 31.89 | 32.17 | 32.35 | 32.51 | 32.57 | 32.45 | 32.43 | 32.43 | 32.41 | 32.38 | 32.36 | 0.4% |
| CNG Bi-fuel               | 27.25 | 27.69 | 27.71 | 27.90 | 28.47 | 28.41 | 28.54 | 28.73 | 28.94 | 29.15 | 29.35 | 29.57 | 29.84 | 30.04 | 30.23 | 30.30 | 29.96 | 29.96 | 29.97 | 29.97 | 29.96 | 29.95 | 0.4% |
| LPG ICE                   | 29.02 | 29.49 | 29.52 | 29.69 | 30.23 | 30.20 | 30.37 | 30.58 | 30.80 | 31.00 | 31.23 | 31.47 | 31.73 | 31.89 | 32.04 | 32.08 | 32.01 | 31.98 | 31.95 | 31.92 | 31.88 | 31.83 | 0.4% |
| LPG Bi-fuel               | 27.62 | 28.10 | 28.11 | 28.27 | 28.84 | 28.77 | 28.88 | 29.04 | 29.22 | 29.39 | 29.60 | 29.82 | 30.08 | 30.26 | 30.42 | 30.47 | 30.41 | 30.39 | 30.38 | 30.36 | 30.33 | 30.31 | 0.4% |
| Electric Technology       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Electric Vehicle          | 33.48 | 32.97 | 32.69 | 32.52 | 30.95 | 33.62 | 37.14 | 41.63 | 47.46 | 47.23 | 47.02 | 46.86 | 46.70 | 46.57 | 46.45 | 46.30 | 46.17 | 46.04 | 45.93 | 45.86 | 45.78 | 45.71 | 1.4% |
| Electric-Diesel Hybrid    | 47.66 | 47.56 | 47.42 | 47.58 | 47.28 | 46.64 | 46.38 | 46.35 | 46.61 | 46.95 | 47.25 | 47.56 | 47.86 | 48.13 | 48.34 | 48.49 | 48.58 | 48.67 | 49.01 | 49.24 | 49.36 | 49.29 | 0.2% |
| Fuel Cell Technology      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Fuel Cell Gasoline        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 42.82 | 42.56 | 42.30 | 42.10 | 41.90 | 41.69 | 41.50 | 41.30 | 41.12 | 40.89 | 40.67 | 40.48 | 40.24 | 40.04 | 39.82 | 39.63 | N/A  |
| Fuel Cell Methanol        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 45.65 | 45.36 | 45.05 | 44.81 | 44.56 | 44.31 | 44.07 | 43.84 | 43.62 | 43.37 | 43.13 | 42.94 | 42.69 | 42.48 | 42.26 | 42.07 | N/A  |
| Fuel Cell Hydrogen        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 49.89 | 49.53 | 49.16 | 48.89 | 48.62 | 48.35 | 48.12 | 47.91 | 47.73 | 47.52 | 47.33 | 47.18 | 46.97 | 46.80 | 46.63 | 46.47 | N/A  |
| Average New Car MPG       | 28.17 | 28.88 | 28.93 | 29.15 | 29.94 | 29.96 | 30.12 | 30.36 | 30.66 | 30.92 | 31.16 | 31.40 | 31.68 | 31.76 | 31.78 | 31.75 | 31.71 | 31.70 | 31.70 | 31.69 | 31.66 | 31.63 | 0.5% |
| Light-Duty Trucks 1/      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Conventional Vehicles     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Gasoline ICE Vehicles     | 20.62 | 20.65 | 20.65 | 20.77 | 21.01 | 20.94 | 21.02 | 21.18 | 21.35 | 21.31 | 21.39 | 21.56 | 21.72 | 21.88 | 22.01 | 22.12 | 22.23 | 22.35 | 22.48 | 22.61 | 22.77 | 22.74 | 0.4% |
| TDI Diesel ICE            | 26.67 | 26.55 | 26.56 | 26.71 | 26.96 | 26.84 | 26.93 | 28.52 | 28.77 | 28.75 | 28.85 | 29.02 | 29.19 | 29.34 | 29.48 | 29.58 | 29.68 | 29.75 | 29.85 | 29.94 | 30.05 | 29.98 | 0.5% |
| Alternative-Fuel Vehicles |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Alcohol Fuel Technology   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Methanol-Flex Fuel ICE    | 20.78 | 21.14 | 21.18 | 21.36 | 21.66 | 21.66 | 21.70 | 21.83 | 22.01 | 21.99 | 22.06 | 22.18 | 22.29 | 22.40 | 22.51 | 22.61 | 22.70 | 22.77 | 22.84 | 22.93 | 23.04 | 23.02 | 0.5% |
| Methanol ICE              | 19.56 | 19.92 | 20.00 | 20.21 | 20.50 | 20.48 | 20.64 | 20.92 | 21.19 | 21.23 | 21.40 | 21.64 | 21.87 | 22.08 | 22.26 | 22.40 | 22.52 | 22.64 | 22.77 | 22.93 | 23.10 | 23.06 | 0.8% |
| Ethanol-Flex Fuel ICE     | 20.73 | 21.12 | 21.17 | 21.34 | 21.65 | 21.60 | 21.64 | 21.77 | 21.95 | 21.91 | 21.96 | 22.06 | 22.16 | 22.26 | 22.36 | 22.45 | 22.55 | 22.63 | 22.72 | 22.82 | 22.93 | 22.92 | 0.5% |
| Ethanol Ice               | 18.88 | 19.22 | 19.30 | 19.53 | 19.86 | 19.89 | 20.11 | 20.47 | 20.84 | 20.98 | 21.24 | 21.55 | 21.81 | 22.04 | 22.19 | 22.32 | 22.42 | 22.51 | 22.59 | 22.70 | 22.82 | 22.74 | 0.8% |
| Natural Gas Technology    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| CNG ICE                   | 19.59 | 19.94 | 20.00 | 20.19 | 20.46 | 20.42 | 20.55 | 20.79 | 21.01 | 20.98 | 21.08 | 21.23 | 21.40 | 21.56 | 21.69 | 21.80 | 21.90 | 22.01 | 22.13 | 22.28 | 22.44 | 22.56 | 0.6% |
| CNG Bi-fuel               | 20.94 | 21.12 | 21.10 | 21.21 | 21.41 | 21.34 | 21.39 | 21.54 | 21.70 | 21.67 | 21.77 | 21.91 | 22.01 | 22.12 | 22.17 | 22.22 | 22.29 | 22.36 | 22.47 | 22.63 | 22.78 | 22.89 | 0.4% |
| LPG ICE                   | 19.01 | 19.29 | 19.34 | 19.52 | 19.80 | 19.75 | 19.87 | 20.11 | 20.33 | 20.30 | 20.40 | 20.57 | 20.74 | 20.89 | 21.02 | 21.13 | 21.23 | 21.34 | 21.46 | 21.61 | 21.75 | 21.88 | 0.6% |
| LPG Bi-fuel               | 22.01 | 22.28 | 22.27 | 22.40 | 22.64 | 22.59 | 22.64 | 22.81 | 23.00 | 22.97 | 23.08 | 23.22 | 23.35 | 23.47 | 23.57 | 23.65 | 23.73 | 23.82 | 23.97 | 24.15 | 24.33 | 24.42 | 0.5% |
| Electric Technology       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Electric Vehicle          | 23.58 | 23.35 | 23.12 | 22.98 | 25.15 | 27.32 | 30.11 | 33.68 | 38.35 | 38.02 | 37.74 | 37.48 | 37.22 | 36.96 | 36.71 | 36.47 | 36.25 | 36.03 | 35.86 | 35.71 | 35.56 | 35.42 | 1.9% |
| Electric-Diesel Hybrid    | 34.44 | 35.06 | 35.18 | 35.57 | 35.78 | 35.53 | 35.53 | 35.78 | 36.27 | 36.19 | 36.31 | 36.45 | 36.57 | 36.72 | 36.84 | 36.93 | 36.97 | 36.98 | 37.22 | 37.37 | 37.44 | 37.36 | 0.4% |

**Table 47. Light-Duty Vehicle MPG by Technology Type (MPG Gasoline Equivalents) (2of 2)**

|                                 | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Fuel Cell Technology            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Fuel Cell Gasoline              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 34.54 | 34.34 | 34.18 | 34.03 | 33.89 | 33.76 | N/A       |
| Fuel Cell Methanol              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 45.57 | 45.15 | 44.79 | 44.40 | 44.05 | 43.74 | 43.45 | 43.15 | 42.87 | 42.60 | 42.34 | 42.10 | 41.91 | 41.74 | 41.56 | 41.40 | N/A       |
| Fuel Cell Hydrogen              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 40.18 | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |
| Average New Truck MPG           | 20.61 | 20.66 | 20.66 | 20.79 | 21.04 | 20.99 | 21.09 | 21.21 | 21.39 | 21.37 | 21.47 | 21.65 | 21.82 | 21.99 | 22.12 | 22.24 | 22.35 | 22.46 | 22.59 | 22.73 | 22.88 | 22.85 | 0.5%      |
| Fleet Avr. Stock Car MPG 2/     | 23.54 | 23.85 | 24.00 | 24.16 | 24.42 | 24.56 | 24.73 | 24.87 | 25.02 | 25.19 | 25.35 | 25.47 | 25.64 | 25.79 | 25.91 | 26.04 | 26.16 | 26.23 | 26.31 | 26.38 | 26.47 | 26.52 | 0.5%      |
| Fleet Avr. Stock Truck MPG 2/   | 16.84 | 16.77 | 16.80 | 16.81 | 16.89 | 16.89 | 16.92 | 16.92 | 16.94 | 16.97 | 16.98 | 17.00 | 17.01 | 17.05 | 17.09 | 17.11 | 17.15 | 17.19 | 17.23 | 17.28 | 17.33 | 17.37 | 0.1%      |
| Fleet Avr. Stock Vehicle MPG 2/ | 20.66 | 20.55 | 20.53 | 20.51 | 20.56 | 20.52 | 20.51 | 20.47 | 20.45 | 20.46 | 20.44 | 20.43 | 20.43 | 20.45 | 20.46 | 20.47 | 20.49 | 20.50 | 20.52 | 20.55 | 20.58 | 20.60 | 0.0%      |

1/ Fuel efficiencies are EPA rated. Includes personal and fleet vehicles.

2/ Stock values are on road efficiencies. Includes personal vehicles, fleet vehicles, and freight light trucks.

IDI = Turbo Direct Injection.

CNG = Compressed natural gas.

LNG = Liquid natural gas.

MPG = Miles per Gallon.

ICE = Internal combustion engine.

N/A = Not applicable.

Avr. = Average.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy and Environmental Analysis Inc., Update to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration, Mid-Model Year Fuel Economy Reports from Auto Manufacturers, 1998; Federal Highway Administration, Highway Statistics 1997, (November 1998); United States Department of Commerce, Bureau of the Census, Truck Inventory and Use Survey, IC92-1-52 (Washington, DC, May 1995); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 48. Technology Market Penetration in Light-Duty Vehicles (1 of 4)  
(Percentage)**

1998-

|                              | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020   |  |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--|
| Car                          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |  |
| Front Wheel Drive            | 85.99 | 86.42 | 86.26 | 86.18 | 86.12 | 86.03 | 85.99 | 85.93 | 85.86 | 85.79 | 85.73 | 85.66 | 85.61 | 85.55 | 85.49 | 85.41 | 85.35 | 85.29 | 85.23 | 85.18 | 85.12 | 85.06 | 0.0%   |  |
| Unit Body                    | 93.44 | 93.34 | 93.22 | 93.15 | 93.74 | 93.62 | 93.57 | 93.51 | 93.46 | 93.41 | 93.35 | 93.30 | 93.26 | 93.21 | 93.16 | 93.10 | 93.04 | 92.99 | 92.94 | 92.89 | 92.84 | 92.78 | 0.0%   |  |
| Material Substitution II     | 16.50 | 19.99 | 21.02 | 23.42 | 34.19 | 34.74 | 34.98 | 36.98 | 39.32 | 39.33 | 39.34 | 39.35 | 39.35 | 39.38 | 39.38 | 39.38 | 39.38 | 39.38 | 39.37 | 39.33 | 39.19 | 39.04 | 4.0%   |  |
| Material Substitution III    | 2.18  | 4.40  | 5.73  | 8.06  | 14.19 | 14.52 | 14.86 | 16.80 | 18.69 | 20.49 | 21.60 | 22.68 | 23.07 | 23.53 | 23.95 | 23.95 | 23.96 | 23.96 | 23.95 | 23.95 | 23.95 | 23.95 | 11.5%  |  |
| Material Substitution IV     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.21  | 1.02  | 2.15  | 3.53  | 5.33  | 7.09  | 8.86  | 10.64 | 12.45 | 14.22 | 15.64 | 17.06 | 18.11 | 19.17 | N/A    |  |
| Material Substitution V      | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.17  | 0.82  | 1.74  | 2.89  | N/A    |  |
| Drag Reduction II            | 32.68 | 33.24 | 33.16 | 34.00 | 27.18 | 26.58 | 24.95 | 22.44 | 19.31 | 15.68 | 12.71 | 9.97  | 7.67  | 5.80  | 3.96  | 2.78  | 1.82  | 0.87  | 0.20  | 0.08  | 0.00  | 0.00  | N/A    |  |
| Drag Reduction III           | 58.84 | 58.14 | 58.24 | 59.17 | 72.64 | 72.67 | 72.65 | 72.66 | 72.51 | 71.90 | 70.95 | 69.93 | 68.29 | 66.46 | 64.41 | 62.02 | 58.24 | 54.75 | 50.45 | 46.33 | 41.90 | 37.64 | -2.0%  |  |
| Drag Reduction IV            | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.56  | 2.19  | 4.68  | 7.94  | 12.17 | 16.07 | 19.81 | 23.75 | 27.42 | 31.30 | 34.48 | 37.78 | 40.17 | 42.57 | 43.49 | 44.68 | 45.61 | N/A    |  |
| Drag Reduction V             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.38  | 1.80  | 3.84  | 6.39  | 9.70  | 13.00 | 16.31 | N/A    |  |
| TCLU                         | 81.26 | 81.01 | 81.14 | 81.21 | 81.24 | 81.34 | 81.36 | 81.40 | 81.43 | 81.46 | 81.49 | 81.53 | 81.56 | 81.58 | 81.61 | 81.64 | 81.67 | 81.70 | 81.72 | 81.75 | 81.78 | 81.81 | 0.0%   |  |
| 4-Speed Automatic            | 58.34 | 55.53 | 53.57 | 52.31 | 50.45 | 49.32 | 48.16 | 46.71 | 45.89 | 44.36 | 43.81 | 43.01 | 42.27 | 42.28 | 42.30 | 42.31 | 42.32 | 42.34 | 42.34 | 42.35 | 42.36 | 42.37 | -1.4%  |  |
| 5-Speed Automatic            | 5.22  | 8.57  | 11.80 | 13.84 | 16.43 | 18.37 | 20.35 | 22.40 | 24.03 | 25.65 | 26.29 | 27.12 | 27.71 | 27.76 | 27.83 | 27.90 | 27.96 | 28.02 | 28.08 | 28.13 | 28.19 | 28.25 | 8.0%   |  |
| CVT                          | 3.82  | 5.20  | 6.57  | 7.70  | 10.07 | 10.59 | 11.18 | 12.18 | 12.94 | 13.65 | 13.83 | 14.11 | 14.31 | 14.26 | 14.19 | 14.13 | 14.07 | 14.02 | 13.97 | 13.93 | 13.88 | 13.83 | 6.0%   |  |
| 6-Speed Manual               | 8.16  | 8.66  | 10.55 | 10.84 | 10.82 | 10.96 | 11.15 | 11.24 | 11.27 | 11.26 | 11.24 | 11.22 | 11.21 | 11.20 | 11.18 | 11.17 | 11.15 | 11.14 | 11.12 | 11.11 | 11.09 | 11.07 | 1.4%   |  |
| Electronic Transmission I    | 22.21 | 22.17 | 22.26 | 22.43 | 26.04 | 26.11 | 26.13 | 26.15 | 26.18 | 26.20 | 26.23 | 26.25 | 26.27 | 26.29 | 26.31 | 26.34 | 26.36 | 26.38 | 26.40 | 26.42 | 26.44 | 26.46 | 0.8%   |  |
| Electronic Transmission II   | 0.49  | 2.53  | 3.60  | 5.99  | 12.30 | 12.86 | 13.23 | 15.34 | 17.86 | 19.94 | 21.60 | 22.93 | 24.37 | 24.71 | 25.43 | 26.00 | 26.05 | 26.07 | 26.08 | 26.09 | 26.11 | 26.13 | 19.8%  |  |
| Roller Cam                   | 95.74 | 96.80 | 96.78 | 97.03 | 98.70 | 98.69 | 98.68 | 98.67 | 98.66 | 98.65 | 98.64 | 98.63 | 98.62 | 98.61 | 98.59 | 98.58 | 98.57 | 98.56 | 98.55 | 98.54 | 98.52 | 98.51 | 0.1%   |  |
| OHV 4                        | 6.27  | 2.97  | 2.05  | 0.97  | 0.30  | 0.13  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A    |  |
| OHV 6                        | 14.44 | 13.07 | 10.67 | 8.16  | 5.65  | 3.13  | 2.19  | 0.94  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A    |  |
| OHV 8                        | 5.66  | 5.32  | 4.39  | 3.44  | 2.66  | 1.87  | 1.44  | 1.01  | 0.84  | 0.84  | 0.84  | 0.85  | 0.85  | 0.85  | 0.85  | 0.85  | 0.85  | 0.85  | 0.86  | 0.86  | 0.86  | 0.87  | -8.2%  |  |
| 4C/4V                        | 41.92 | 45.34 | 44.91 | 44.35 | 42.75 | 41.03 | 39.49 | 37.78 | 35.84 | 34.39 | 32.94 | 31.98 | 31.06 | 30.65 | 30.12 | 29.69 | 29.58 | 29.48 | 29.40 | 29.31 | 29.21 | 29.12 | -1.6%  |  |
| 6C/4V                        | 19.43 | 24.02 | 26.80 | 29.46 | 32.00 | 34.53 | 35.47 | 36.78 | 37.77 | 37.83 | 37.91 | 37.98 | 38.04 | 38.10 | 38.18 | 38.26 | 38.33 | 38.39 | 38.44 | 38.49 | 38.54 | 38.59 | 3.2%   |  |
| 8C/4V                        | 6.09  | 8.34  | 9.37  | 10.37 | 11.24 | 12.26 | 12.73 | 13.21 | 13.45 | 13.50 | 13.55 | 13.60 | 13.65 | 13.69 | 13.73 | 13.78 | 13.83 | 13.88 | 13.92 | 13.98 | 14.03 | 14.09 | 3.9%   |  |
| Cylinder Reduction           | 8.49  | 11.38 | 12.58 | 13.92 | 15.39 | 16.40 | 16.76 | 17.36 | 17.84 | 17.89 | 17.94 | 17.98 | 18.01 | 18.05 | 18.08 | 18.12 | 18.16 | 18.19 | 18.22 | 18.25 | 18.28 | 18.31 | 3.6%   |  |
| 4C/5V                        | 0.22  | 2.55  | 4.12  | 6.03  | 7.94  | 9.82  | 11.71 | 13.60 | 15.48 | 16.87 | 18.26 | 19.15 | 20.04 | 20.36 | 20.80 | 21.12 | 21.10 | 21.08 | 21.07 | 21.05 | 21.04 | 21.02 | 23.1%  |  |
| Turbo                        | 4.71  | 4.53  | 4.67  | 4.73  | 4.78  | 4.79  | 4.78  | 4.79  | 4.80  | 4.82  | 4.84  | 4.85  | 4.86  | 4.87  | 4.89  | 4.91  | 4.92  | 4.93  | 4.94  | 4.95  | 4.96  | 4.97  | 0.3%   |  |
| Engine Friction Reduction I  | 84.32 | 81.22 | 80.48 | 75.62 | 60.13 | 59.79 | 59.77 | 57.11 | 51.56 | 45.83 | 40.54 | 36.47 | 31.63 | 27.65 | 24.03 | 20.46 | 17.09 | 14.30 | 11.15 | 7.85  | 4.78  | 2.93  | -14.2% |  |
| Engine Friction Reduction II | 9.21  | 15.09 | 16.26 | 22.11 | 39.69 | 40.02 | 40.02 | 42.23 | 46.16 | 49.50 | 51.95 | 52.42 | 53.60 | 54.09 | 54.10 | 54.03 | 53.65 | 53.19 | 52.12 | 51.30 | 49.80 | 47.75 | 7.8%   |  |
| Engine Friction Reduction IV | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.43  | 2.04  | 4.41  | 7.24  | 10.82 | 14.47 | 17.95 | 21.54 | 25.16 | 28.89 | 31.78 | 34.70 | 36.92 | 39.13 | 39.98 | N/A    |  |
| Engine Friction Reduction V  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.35  | 1.65  | 3.53  | 5.87  | 8.90  | N/A    |  |
| WT I                         | 1.00  | 9.81  | 16.81 | 25.33 | 33.81 | 42.18 | 50.80 | 59.41 | 67.89 | 74.69 | 78.86 | 80.65 | 82.38 | 74.29 | 65.63 | 56.97 | 48.32 | 39.67 | 31.03 | 24.07 | 17.12 | 11.86 | 11.9%  |  |
| WT II                        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 1.00  | 4.71  | 10.08 | 16.75 | 25.40 | 34.05 | 42.69 | 51.32 | 59.95 | 68.58 | 75.52 | 82.46 | 87.70 | N/A    |  |
| Lean Burn                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A    |  |
| Two Stroke                   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A    |  |
| TBI                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A    |  |
| MPI                          | 99.90 | 99.89 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | 0.0%   |  |
| Air Pump                     | 93.53 | 94.09 | 94.01 | 93.96 | 93.94 | 93.96 | 93.95 | 93.92 | 93.89 | 93.87 | 93.84 | 93.81 | 93.79 | 93.77 | 93.75 | 93.73 | 93.71 | 93.69 | 93.67 | 93.66 | 93.64 | 93.62 | 0.0%   |  |
| DFS                          | 98.34 | 99.39 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | 0.1%   |  |
| Oil SW-30                    | 80.02 | 76.30 | 70.97 | 65.63 | 57.02 | 48.36 | 39.74 | 31.08 | 24.11 | 17.15 | 11.90 | 6.65  | 4.68  | 2.06  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | -26.7% |  |
| Oil Synthetic                | 4.73  | 16.81 | 25.40 | 34.09 | 42.80 | 51.45 | 60.05 | 68.70 | 75.65 | 82.59 | 87.83 | 93.07 | 95.02 | 97.63 | 99.58 | 99.57 | 99.55 | 99.54 | 99.52 | 99.51 | 99.49 | 99.48 | 14.8%  |  |
| Tires I                      | 37.26 | 37.48 | 37.47 | 39.06 | 59.81 | 59.85 | 59.86 | 59.65 | 58.92 | 57.78 | 56.70 | 55.66 | 54.47 | 53.83 | 51.62 | 49.11 | 44.96 | 40.85 | 35.64 | 30.15 | 24.19 | 18.72 | -3.1%  |  |
| Tires II                     | 0.00  | 0.00  | 0.00  | 0.47  | 3.35  | 5.98  | 8.29  | 12.61 | 17.22 | 21.77 | 25.78 | 29.60 | 33.74 | 36.72 | 40.01 | 42.57 | 45.28 | 46.20 | 47.48 | 48.45 | 48.47 | 47.20 | N/A    |  |
| Tires III                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.48  | 2.25  | 4.82  | 8.05  | 12.20 | 16.36 | 20.53 | 24.68 | 28.85 | N/A    |  |
| Tires IV                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.47  | 2.24  | 4.79  | N/A    |  |
| ACC I                        | 20.63 | 20.57 | 20.59 | 21.16 | 31.34 | 31.39 | 31.41 | 31.43 | 31.45 | 31.49 | 31.52 | 31.54 | 31.56 | 31.58 | 31.60 | 31.62 | 31.65 | 31.66 | 31.68 | 31.70 | 31.72 | 31.74 | 2.0%   |  |
| ACC II                       | 2.22  | 4.68  | 6.04  | 8.63  | 16.01 | 16.22 | 16.38 | 18.29 | 20.47 | 22.52 | 23.82 | 25.05 | 25.50 | 26.00 | 26.50 | 26.52 | 26.57 | 26.58 | 26.59 | 26.61 | 26.62 | 26.64 | 12.0%  |  |
| EPS                          | 0.00  | 0.00  | 0.00  | 0.05  | 0.46  | 0.79  | 1.06  | 1.51  | 1.98  | 2.45  | 2.86  | 3.25  | 3.68  | 3.93  | 4.20  | 4.34  | 4.49  | 4.53  | 4.59  | 4.63  | 4.61  | 4.60  | N/A    |  |

**Table 48. Technology Market Penetration in Light-Duty Vehicles (2 of 4)  
(Percentage)**

|                              | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| 4WD Improvements             | 0.00   | 0.00   | 0.00   | 0.16   | 0.83   | 1.54   | 2.33   | 3.73   | 5.21   | 6.68   | 8.02   | 9.33   | 10.70  | 11.82  | 13.04  | 14.11  | 15.22  | 15.62  | 16.17  | 16.59  | 16.62  | 16.65  | N/A       |
| Air Bags                     | 99.90  | 99.89  | 99.87  | 99.85  | 99.83  | 99.81  | 99.79  | 99.78  | 99.76  | 99.74  | 99.73  | 99.72  | 99.70  | 99.69  | 99.67  | 99.66  | 99.64  | 99.62  | 99.61  | 99.60  | 99.58  | 99.57  | 0.0%      |
| Emissions Tier I             | 99.90  | 99.89  | 99.87  | 99.85  | 99.83  | 99.81  | 99.79  | 99.78  | 99.76  | 99.74  | 99.73  | 99.72  | 99.70  | 99.69  | 99.67  | 99.66  | 99.64  | 99.62  | 99.61  | 99.60  | 99.58  | 99.57  | 0.0%      |
| Emissions Tier II            | 0.00   | 0.00   | 0.00   | 0.00   | 0.10   | 0.91   | 99.79  | 99.78  | 99.76  | 99.74  | 99.73  | 99.72  | 99.70  | 99.69  | 99.67  | 99.66  | 99.64  | 99.62  | 99.61  | 99.60  | 99.58  | 99.57  | N/A       |
| ABS                          | 15.88  | 99.89  | 99.87  | 99.85  | 99.83  | 99.81  | 99.79  | 99.78  | 99.76  | 99.74  | 99.73  | 99.72  | 99.70  | 99.69  | 99.67  | 99.66  | 99.64  | 99.62  | 99.61  | 99.60  | 99.58  | 99.57  | 8.7%      |
| Side Impact                  | 99.90  | 99.89  | 99.87  | 99.85  | 99.83  | 99.81  | 99.79  | 99.78  | 99.76  | 99.74  | 99.73  | 99.72  | 99.70  | 99.69  | 99.67  | 99.66  | 99.64  | 99.62  | 99.61  | 99.60  | 99.58  | 99.57  | 0.0%      |
| Roof Crush                   | 0.00   | 0.00   | 99.87  | 99.85  | 99.83  | 99.81  | 99.79  | 99.78  | 99.76  | 99.74  | 99.73  | 99.72  | 99.70  | 99.69  | 99.67  | 99.66  | 99.64  | 99.62  | 99.61  | 99.60  | 99.58  | 99.57  | N/A       |
| Increase Size/Weight         | 26.64  | 33.30  | 36.62  | 39.94  | 43.26  | 46.58  | 49.90  | 53.21  | 56.53  | 59.85  | 63.16  | 66.48  | 69.79  | 73.11  | 76.42  | 79.73  | 83.03  | 86.34  | 89.65  | 92.96  | 96.26  | 99.57  | 6.2%      |
| GDI/4-cylinder               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.04   | 0.27   | 0.56   | 0.90   | 1.27   | 1.65   | 2.02   | 2.39   | 2.76   | 3.13   | 3.39   | 3.64   | 3.78   | 3.92   | 3.97   | 4.03   | N/A       |
| GDI/6-cylinder               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.03   | 0.11   | 0.25   | 0.44   | 0.70   | 0.97   | 1.24   | 1.50   | 1.77   | 2.04   | 2.29   | 2.53   | 2.75   | 2.96   | 3.05   | 3.16   | N/A       |
| Gasoline Hybrid              | 0.00   | 0.00   | 0.06   | 0.30   | 0.68   | 1.11   | 1.65   | 2.21   | 2.77   | 3.33   | 3.89   | 4.44   | 4.89   | 5.33   | 5.66   | 6.00   | 6.13   | 6.30   | 6.42   | 6.42   | 6.42   | 6.42   | N/A       |
| Light Truck                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Front Wheel Drive            | 73.17  | 75.91  | 75.83  | 75.84  | 77.02  | 77.21  | 77.31  | 77.37  | 77.43  | 77.48  | 77.52  | 77.57  | 77.61  | 77.65  | 77.68  | 77.72  | 77.77  | 77.81  | 77.84  | 77.89  | 77.93  | 77.96  | 0.3%      |
| Unit Body                    | 9.33   | 20.87  | 25.47  | 31.47  | 39.16  | 44.68  | 48.60  | 53.63  | 58.13  | 58.48  | 58.89  | 59.46  | 59.90  | 59.98  | 60.07  | 60.18  | 60.34  | 60.45  | 60.56  | 60.72  | 60.87  | 61.00  | 8.9%      |
| Material Substitution II     | 16.50  | 19.99  | 21.02  | 23.42  | 34.19  | 34.74  | 34.98  | 36.98  | 39.32  | 39.33  | 39.34  | 39.35  | 39.35  | 39.38  | 39.38  | 39.38  | 39.38  | 39.38  | 39.37  | 39.33  | 39.19  | 39.04  | 4.0%      |
| Material Substitution III    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.37   | 1.28   | 2.03   | 3.59   | 5.77   | 7.96   | 10.08  | 12.21  | 14.33  | 16.47  | 18.33  | 20.20  | 21.85  | 23.45  | 23.98  | N/A       |
| Material Substitution IV     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.22   | 0.73   | 1.63   | 2.90   | 4.70   | N/A       |
| Material Substitution V      | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Drag Reduction II            | 62.47  | 71.66  | 70.29  | 69.37  | 62.48  | 55.07  | 48.49  | 40.63  | 32.39  | 30.56  | 25.91  | 19.33  | 13.03  | 7.52   | 4.30   | 1.98   | 0.36   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Drag Reduction III           | 3.05   | 12.48  | 19.48  | 27.56  | 37.52  | 44.93  | 51.51  | 59.37  | 66.72  | 67.23  | 69.12  | 71.88  | 72.62  | 72.75  | 70.60  | 67.58  | 63.81  | 58.96  | 53.85  | 48.12  | 42.31  | 35.97  | 11.9%     |
| Drag Reduction IV            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.89   | 2.21   | 4.97   | 8.79   | 14.35  | 19.73  | 25.09  | 30.44  | 35.84  | 41.04  | 45.76  | 50.45  | 54.53  | 58.54  | N/A       |
| Drag Reduction V             | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.39   | 1.43   | 3.17   | 5.49   | N/A       |
| TCLU                         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| 4-Speed Automatic            | 66.70  | 66.66  | 64.74  | 62.43  | 58.58  | 56.93  | 55.17  | 52.10  | 48.38  | 48.19  | 46.49  | 43.43  | 42.02  | 40.30  | 38.87  | 38.33  | 37.86  | 37.40  | 36.99  | 36.59  | 36.48  | 36.31  | -2.7%     |
| 5-Speed Automatic            | 1.02   | 4.80   | 8.18   | 11.56  | 17.03  | 19.56  | 22.09  | 25.59  | 29.02  | 29.05  | 30.25  | 32.81  | 33.72  | 34.94  | 35.88  | 35.91  | 35.94  | 35.97  | 35.99  | 36.02  | 36.04  | 36.07  | 17.6%     |
| CVT                          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.09   | 0.31   | 0.70   | 0.92   | 1.49   | 2.05   | 2.62   | 3.17   | 3.72   | 4.27   | 4.76   | 5.23   | 5.65   | 6.07   | 6.19   | 6.37   | N/A       |
| 6-Speed Manual               | 0.83   | 2.55   | 4.34   | 5.53   | 6.78   | 7.96   | 9.31   | 10.64  | 11.62  | 11.59  | 12.13  | 12.78  | 12.98  | 13.28  | 13.51  | 13.48  | 13.45  | 13.43  | 13.41  | 13.39  | 13.36  | 13.34  | 13.5%     |
| Electronic Transmission I    | 19.33  | 25.83  | 25.73  | 27.86  | 38.95  | 39.04  | 39.11  | 39.14  | 39.17  | 39.20  | 39.23  | 39.25  | 39.27  | 39.30  | 39.32  | 39.34  | 39.36  | 39.34  | 39.28  | 39.30  | 39.32  | 39.33  | 3.3%      |
| Electronic Transmission II   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.42   | 1.24   | 2.05   | 3.74   | 6.16   | 8.59   | 10.92  | 13.25  | 15.58  | 17.94  | 20.05  | 22.15  | 24.10  | 26.00  | 26.60  | N/A       |
| Roller Cam                   | 95.21  | 98.38  | 99.13  | 99.93  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 99.99  | 0.2%      |
| OHV 4                        | 5.49   | 3.09   | 2.40   | 1.70   | 1.17   | 0.64   | 0.45   | 0.19   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| OHV 6                        | 22.82  | 20.62  | 16.43  | 12.60  | 10.33  | 5.07   | 3.59   | 1.68   | 0.24   | 0.24   | 0.24   | 0.25   | 0.25   | 0.25   | 0.25   | 0.25   | 0.25   | 0.25   | 0.25   | 0.26   | 0.26   | 0.26   | -18.4%    |
| OHV 8                        | 2.99   | 7.41   | 10.11  | 12.47  | 14.19  | 16.86  | 19.53  | 21.86  | 22.70  | 21.18  | 19.17  | 17.18  | 15.28  | 13.31  | 11.33  | 9.38   | 7.47   | 6.80   | 5.87   | 5.16   | 5.15   | 5.15   | 2.5%      |
| 4C/4V                        | 10.60  | 10.83  | 11.29  | 11.71  | 12.02  | 12.24  | 12.25  | 12.36  | 12.48  | 12.41  | 12.41  | 12.40  | 12.40  | 12.39  | 12.38  | 12.37  | 12.35  | 12.33  | 12.32  | 12.29  | 12.27  | 12.25  | 0.7%      |
| 6C/4V                        | 26.17  | 35.30  | 39.44  | 43.34  | 45.77  | 51.31  | 52.96  | 54.99  | 56.54  | 56.61  | 56.68  | 56.75  | 56.80  | 56.86  | 56.91  | 56.98  | 57.06  | 57.10  | 57.16  | 57.22  | 57.27  | 57.32  | 3.6%      |
| 8C/4V                        | 0.00   | 0.00   | 0.00   | 0.28   | 0.49   | 1.26   | 2.64   | 4.76   | 6.80   | 8.32   | 10.30  | 12.28  | 14.17  | 16.12  | 18.09  | 20.03  | 21.91  | 22.58  | 23.50  | 24.21  | 24.20  | 24.19  | N/A       |
| Cylinder Reduction           | 11.34  | 16.24  | 18.05  | 20.20  | 22.12  | 24.50  | 26.56  | 29.53  | 31.41  | 32.20  | 33.15  | 33.97  | 34.46  | 34.47  | 34.48  | 34.50  | 34.50  | 34.50  | 34.50  | 34.49  | 34.48  | 34.47  | 5.2%      |
| 4C/5V                        | 0.36   | 0.54   | 0.73   | 0.90   | 1.02   | 1.09   | 1.15   | 1.23   | 1.24   | 1.24   | 1.20   | 1.15   | 1.11   | 1.07   | 1.04   | 1.00   | 0.95   | 0.93   | 0.90   | 0.87   | 0.85   | 0.82   | 3.8%      |
| Turbo                        | 1.29   | 1.71   | 2.15   | 2.21   | 2.22   | 2.23   | 2.29   | 2.30   | 2.31   | 2.32   | 2.32   | 2.33   | 2.33   | 2.34   | 2.34   | 2.34   | 2.35   | 2.35   | 2.35   | 2.35   | 2.35   | 2.35   | 2.8%      |
| Engine Friction Reduction I  | 87.75  | 93.76  | 95.18  | 96.13  | 94.94  | 92.28  | 87.70  | 79.90  | 72.00  | 70.02  | 64.09  | 58.14  | 52.00  | 46.09  | 39.35  | 31.97  | 23.48  | 17.24  | 10.85  | 6.87   | 4.59   | 2.52   | -14.9%    |
| Engine Friction Reduction II | 0.00   | 0.00   | 0.00   | 0.92   | 3.20   | 7.10   | 12.30  | 20.10  | 28.00  | 29.98  | 35.91  | 41.86  | 48.00  | 53.30  | 58.69  | 63.60  | 68.60  | 69.87  | 71.33  | 70.42  | 67.88  | 65.19  | N/A       |
| Engine Friction Reduction IV | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.62   | 1.96   | 4.43   | 7.92   | 12.88  | 17.82  | 22.71  | 27.53  | 32.29  | N/A       |
| Engine Friction Reduction V  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| WT I                         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 1.00   | 3.26   | 7.36   | 13.14  | 21.45  | 29.76  | 38.08  | 46.39  | 54.70  | 63.01  | 70.54  | 76.52  | 81.69  | 86.85  | 78.54  | N/A       |
| WT II                        | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 1.00   | 3.26   | 7.36   | 13.15  | 21.46  | N/A       |
| Lean Burn                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Two Stroke                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| TBI                          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| MPI                          | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.0%      |
| Air Pump                     | 50.91  | 52.04  | 52.02  | 52.06  | 52.14  | 52.24  | 52.33  | 52.39  | 52.45  | 52.50  | 52.54  | 52.57  | 52.60  | 52.62  | 52.65  | 52.67  | 52.70  | 52.72  | 52.74  | 52.76  | 52.78  | 52.80  | 0.2%      |
| DFS                          | 90.41  | 97.51  | 99.44  | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.5%      |
| Oil SW-30                    | 94.98  | 86.85  | 78.54  | 70.22  | 61.91  | 53.59  | 45.28  | 36.96  | 29.44  | 21.91  | 15.17  | 8.43   | 5.90   | 2.53   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -38.1%    |
| Oil Synthetic                | 3.26   | 13.15  | 21.46  | 29.78  | 38.09  | 46.41  | 54.72  | 63.04  | 70.56  | 78.09  | 84.83  | 91.57  | 94.10  |        |        |        |        |        |        |        |        |        |           |

**Table 48. Technology Market Penetration in Light-Duty Vehicles (3 of 4)  
(Percentage)**

|                              | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-  |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| EPS                          | 0.00   | 0.00   | 0.00   | 0.01   | 0.12   | 0.20   | 0.25   | 0.32   | 0.39   | 0.37   | 0.36   | 0.34   | 0.33   | 0.32   | 0.31   | 0.30   | 0.28   | 0.28   | 0.27   | 0.26   | 0.25   | 0.24   | N/A    |
| 4WD Improvements             | 0.00   | 0.00   | 0.00   | 0.19   | 1.00   | 1.96   | 2.97   | 4.71   | 6.55   | 6.57   | 7.19   | 8.26   | 9.41   | 10.35  | 11.34  | 12.22  | 13.13  | 13.43  | 13.86  | 14.19  | 14.25  | 14.31  | N/A    |
| Air Bags                     | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.0%   |
| Emissions Tier I             | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.0%   |
| Emissions Tier II            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | N/A    |
| ABS                          | 70.12  | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 1.6%   |
| Side Impact                  | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.0%   |
| Roof Crush                   | 0.00   | 0.00   | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | N/A    |
| Increase Size/Weight         | 26.67  | 33.33  | 36.67  | 40.00  | 43.33  | 46.67  | 50.00  | 53.33  | 56.67  | 60.00  | 63.33  | 66.67  | 70.00  | 73.33  | 76.67  | 80.00  | 83.33  | 86.67  | 90.00  | 93.33  | 96.67  | 100.00 | 6.2%   |
| GDI/4-cylinder               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.02   | 0.12   | 0.25   | 0.29   | 0.40   | 0.52   | 0.64   | 0.76   | 0.87   | 0.98   | 1.06   | 1.14   | 1.18   | 1.23   | 1.24   | 1.26   | N/A    |
| GDI/6-cylinder               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.07   | 0.22   | 0.50   | 0.71   | 1.16   | 1.60   | 2.04   | 2.48   | 2.92   | 3.36   | 3.76   | 4.15   | 4.51   | 4.86   | 4.99   | 5.15   | N/A    |
| Gasoline Hybrid              | 0.00   | 0.00   | 0.07   | 0.23   | 0.54   | 0.94   | 1.50   | 2.07   | 2.66   | 3.04   | 3.58   | 4.12   | 4.61   | 5.10   | 5.54   | 5.97   | 6.14   | 6.35   | 6.51   | 6.51   | 6.51   | 6.51   | N/A    |
| Light-Duty Vehicle Total     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Front Wheel Drive            | 49.98  | 49.67  | 48.97  | 48.45  | 48.53  | 48.12  | 47.83  | 47.56  | 47.33  | 47.12  | 46.94  | 46.78  | 46.65  | 46.53  | 46.41  | 46.31  | 46.21  | 46.13  | 46.06  | 45.98  | 45.91  | 45.85  | -0.4%  |
| Unit Body                    | 56.42  | 60.48  | 62.03  | 64.39  | 68.02  | 70.35  | 72.02  | 74.28  | 76.33  | 76.39  | 76.50  | 76.70  | 76.84  | 76.83  | 76.81  | 76.80  | 76.83  | 76.84  | 76.85  | 76.89  | 76.93  | 76.96  | 1.4%   |
| Material Substitution II     | 16.50  | 19.99  | 21.02  | 23.42  | 34.19  | 34.74  | 34.98  | 36.98  | 39.32  | 39.33  | 39.34  | 39.35  | 39.35  | 39.38  | 39.38  | 39.38  | 39.38  | 39.38  | 39.37  | 39.33  | 39.19  | 39.04  | 4.0%   |
| Material Substitution III    | 1.22   | 2.41   | 3.09   | 4.30   | 7.50   | 7.62   | 7.74   | 8.88   | 10.25  | 11.50  | 12.79  | 14.39  | 15.64  | 16.90  | 18.15  | 19.19  | 20.25  | 21.17  | 22.09  | 22.90  | 23.70  | 23.96  | 14.5%  |
| Material Substitution IV     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.11   | 0.52   | 1.10   | 1.80   | 2.71   | 3.59   | 4.48   | 5.37   | 6.28   | 7.27   | 8.23   | 9.39   | 10.54  | 11.96  | N/A    |
| Material Substitution V      | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.09   | 0.41   | 0.88   | 1.45   | N/A    |
| Drag Reduction II            | 45.79  | 50.66  | 50.25  | 50.49  | 43.82  | 40.12  | 36.23  | 31.21  | 25.65  | 22.93  | 19.17  | 14.56  | 10.31  | 6.65   | 4.13   | 2.39   | 1.09   | 0.44   | 0.10   | 0.04   | 0.00   | 0.00   | N/A    |
| Drag Reduction III           | 34.28  | 37.43  | 40.39  | 44.43  | 56.09  | 59.48  | 62.52  | 66.25  | 69.70  | 69.62  | 70.05  | 70.88  | 70.42  | 69.56  | 67.47  | 64.77  | 61.00  | 56.84  | 52.14  | 47.22  | 42.10  | 36.81  | 0.3%   |
| Drag Reduction IV            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.30   | 1.14   | 2.42   | 4.52   | 7.32   | 10.64  | 14.41  | 19.12  | 23.63  | 28.24  | 32.48  | 36.82  | 40.60  | 44.16  | 46.95  | 49.58  | 52.05  | N/A    |
| Drag Reduction V             | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.19   | 0.91   | 1.94   | 3.41   | 5.59   | 8.11   | 10.93  | N/A    |
| TCLU                         | 77.70  | 78.70  | 78.70  | 78.70  | 79.25  | 79.37  | 79.42  | 79.45  | 79.49  | 79.52  | 79.55  | 79.59  | 79.61  | 79.64  | 79.67  | 79.70  | 79.74  | 79.77  | 79.80  | 79.83  | 79.86  | 79.89  | 0.1%   |
| 4-Speed Automatic            | 62.02  | 60.58  | 58.71  | 57.03  | 54.28  | 52.94  | 51.52  | 49.31  | 47.10  | 46.23  | 45.12  | 43.21  | 42.15  | 41.31  | 40.60  | 40.34  | 40.11  | 39.89  | 39.68  | 39.49  | 39.43  | 39.35  | -2.0%  |
| 5-Speed Automatic            | 3.37   | 6.86   | 10.13  | 12.78  | 16.71  | 18.94  | 21.18  | 23.94  | 26.45  | 27.31  | 28.23  | 29.91  | 30.66  | 31.30  | 31.81  | 31.86  | 31.92  | 31.97  | 32.01  | 32.05  | 32.10  | 32.15  | 10.8%  |
| CVT                          | 2.14   | 2.84   | 3.54   | 4.11   | 5.32   | 5.55   | 5.87   | 6.46   | 7.01   | 7.45   | 7.80   | 8.20   | 8.56   | 8.79   | 9.02   | 9.25   | 9.45   | 9.66   | 9.84   | 10.02  | 10.05  | 10.12  | 7.3%   |
| 6-Speed Manual               | 4.93   | 5.89   | 7.69   | 8.37   | 8.92   | 9.54   | 10.27  | 10.95  | 11.41  | 11.42  | 11.68  | 11.99  | 12.08  | 12.22  | 12.33  | 12.31  | 12.29  | 12.28  | 12.26  | 12.24  | 12.22  | 12.20  | 4.2%   |
| Electronic Transmission I    | 20.94  | 23.83  | 23.85  | 24.96  | 32.13  | 32.26  | 32.35  | 32.41  | 32.48  | 32.53  | 32.58  | 32.63  | 32.67  | 32.70  | 32.74  | 32.77  | 32.81  | 32.81  | 32.80  | 32.82  | 32.85  | 32.87  | 2.1%   |
| Electronic Transmission II   | 0.27   | 1.38   | 1.94   | 3.20   | 6.50   | 6.74   | 6.89   | 8.14   | 9.80   | 11.23  | 12.87  | 14.70  | 16.61  | 17.91  | 19.41  | 20.84  | 22.03  | 23.08  | 24.13  | 25.10  | 26.05  | 26.36  | 23.1%  |
| Roller Cam                   | 95.51  | 97.52  | 97.86  | 98.38  | 99.31  | 99.31  | 99.31  | 99.31  | 99.30  | 99.30  | 99.30  | 99.30  | 99.29  | 99.29  | 99.29  | 99.28  | 99.27  | 99.27  | 99.27  | 99.26  | 99.26  | 99.25  | 0.2%   |
| OHV 4                        | 5.93   | 3.02   | 2.21   | 1.31   | 0.71   | 0.37   | 0.21   | 0.09   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A    |
| OHV 6                        | 18.13  | 16.50  | 13.32  | 10.23  | 7.86   | 4.05   | 2.86   | 1.30   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 0.12   | 0.13   | 0.13   | 0.13   | 0.13   | -20.1% |
| OHV 8                        | 4.48   | 6.26   | 7.02   | 7.65   | 8.09   | 9.00   | 10.11  | 11.07  | 11.44  | 10.75  | 9.81   | 8.86   | 7.95   | 6.99   | 6.03   | 5.07   | 4.13   | 3.81   | 3.35   | 3.00   | 3.00   | 3.00   | -1.8%  |
| 4C/4V                        | 28.13  | 29.69  | 29.43  | 29.13  | 28.27  | 27.34  | 26.44  | 25.52  | 24.51  | 23.68  | 22.90  | 22.38  | 21.88  | 21.65  | 21.36  | 21.12  | 21.04  | 20.97  | 20.91  | 20.85  | 20.78  | 20.72  | -1.4%  |
| 6C/4V                        | 22.40  | 29.13  | 32.62  | 35.93  | 38.49  | 42.51  | 43.85  | 45.56  | 46.87  | 46.98  | 47.09  | 47.19  | 47.27  | 47.35  | 47.44  | 47.53  | 47.61  | 47.68  | 47.74  | 47.80  | 47.86  | 47.92  | 3.5%   |
| 8C/4V                        | 3.41   | 4.56   | 5.05   | 5.66   | 6.17   | 7.03   | 7.90   | 9.14   | 10.23  | 10.98  | 11.96  | 12.95  | 13.90  | 14.89  | 15.88  | 16.87  | 17.84  | 18.20  | 18.68  | 19.06  | 19.09  | 19.12  | 8.2%   |
| Cylinder Reduction           | 9.75   | 13.59  | 15.10  | 16.85  | 18.56  | 20.25  | 21.46  | 23.23  | 24.42  | 24.86  | 25.37  | 25.82  | 26.10  | 26.15  | 26.19  | 26.23  | 26.26  | 26.28  | 26.31  | 26.32  | 26.34  | 26.36  | 4.6%   |
| 4C/5V                        | 0.28   | 1.64   | 2.56   | 3.64   | 4.68   | 5.67   | 6.65   | 7.63   | 8.58   | 9.26   | 9.92   | 10.32  | 10.73  | 10.85  | 11.03  | 11.16  | 11.11  | 11.08  | 11.05  | 11.02  | 10.99  | 10.96  | 18.2%  |
| Turbo                        | 3.20   | 3.25   | 3.51   | 3.55   | 3.57   | 3.57   | 3.59   | 3.59   | 3.60   | 3.60   | 3.61   | 3.61   | 3.62   | 3.62   | 3.63   | 3.64   | 3.65   | 3.65   | 3.65   | 3.66   | 3.66   | 3.67   | 0.6%   |
| Engine Friction Reduction I  | 85.83  | 86.91  | 87.25  | 85.18  | 76.54  | 75.24  | 73.15  | 68.10  | 61.47  | 57.61  | 52.06  | 47.10  | 41.65  | 36.74  | 31.60  | 26.16  | 20.26  | 15.76  | 11.00  | 7.36   | 4.69   | 2.73   | -14.5% |
| Engine Friction Reduction II | 5.16   | 8.25   | 8.78   | 12.23  | 22.50  | 24.36  | 26.74  | 31.56  | 37.36  | 39.99  | 44.11  | 47.24  | 50.84  | 53.70  | 56.37  | 58.77  | 61.06  | 61.47  | 61.66  | 60.81  | 58.80  | 56.43  | 11.5%  |
| Engine Friction Reduction IV | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.22   | 1.05   | 2.26   | 3.70   | 5.51   | 7.35   | 9.40   | 11.87  | 14.90  | 18.50  | 22.40  | 26.31  | 29.86  | 33.36  | 36.15  | N/A    |
| Engine Friction Reduction V  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.18   | 0.83   | 1.77   | 2.95   | 4.47   | N/A    |
| WT I                         | 0.56   | 5.36   | 9.07   | 13.52  | 17.88  | 22.13  | 26.46  | 31.24  | 36.55  | 41.89  | 46.73  | 51.61  | 56.49  | 56.43  | 56.12  | 55.85  | 55.60  | 54.99  | 53.63  | 52.72  | 51.83  | 45.07  | 22.1%  |
| WT II                        | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.51   | 2.41   | 5.13   | 8.51   | 12.88  | 17.22  | 21.56  | 25.88  | 30.69  | 36.13  | 41.63  | 47.96  | 54.71  | N/A    |
| Lean Burn                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A    |
| Two Stroke                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A    |
| TBI                          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A    |
| MPI                          | 99.95  | 99.94  | 99.93  | 99.92  | 99.91  | 99.90  | 99.89  | 99.88  | 99.88  | 99.87  | 99.86  | 99.86  | 99.85  | 99.84  | 99.84  | 99.83  | 99.82  | 99.81  | 99.80  | 99.80  | 99.79  | 99.78  | 0.0%   |
| Air Pump                     | 74.77  | 75.02  | 74.68  | 74.43  | 74.24  | 74.12  | 74.01  | 73.90  | 73.80  | 73.72  | 73.64  | 73.58  | 73.52  | 73.48  | 73.44  | 73.41  | 73.38  | 73.36  | 73.34  | 73.32  | 73.30  | 73.29  | -0.1%  |
| DFS                          | 94.85  | 98.54  | 99.67  | 99.92  | 99.91  | 99.90  | 99.89  | 99.88  | 99.88  | 99.87  | 99.86  | 99.86  | 99.85  | 99.84  | 99.84  | 99.83  | 99.82  | 99.81  | 99.80  | 99.80  | 99.79  | 99.78  | 0.2    |

**Table 48. Technology Market Penetration in Light-Duty Vehicles (4 of 4)  
(Percentage)**

|                      | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |      |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------|
| ACC I                | 12.24 | 14.50 | 15.85 | 18.39 | 29.03 | 30.11 | 30.69 | 32.94 | 35.29 | 35.34 | 35.38 | 35.58 | 35.77 | 36.01 | 36.19 | 36.22 | 36.25 | 36.27 | 36.29 | 36.32 | 36.34 | 36.36 | 5.1%      |      |
| ACC II               | 1.24  | 2.56  | 3.26  | 4.61  | 8.47  | 8.51  | 8.53  | 9.47  | 10.82 | 12.14 | 13.51 | 15.16 | 16.92 | 18.66 | 20.41 | 21.92 | 23.46 | 24.93 | 26.29 | 27.64 | 28.83 | 30.01 | 15.6%     |      |
| EPS                  | 0.00  | 0.00  | 0.00  | 0.03  | 0.30  | 0.51  | 0.68  | 0.94  | 1.21  | 1.43  | 1.63  | 1.82  | 2.03  | 2.15  | 2.28  | 2.34  | 2.41  | 2.42  | 2.44  | 2.46  | 2.44  | 2.43  | 2.43      | N/A  |
| 4WD Improvements     | 0.00  | 0.00  | 0.00  | 0.17  | 0.91  | 1.74  | 2.63  | 4.20  | 5.86  | 6.63  | 7.61  | 8.80  | 10.07 | 11.10 | 12.20 | 13.17 | 14.18 | 14.54 | 15.02 | 15.39 | 15.44 | 15.48 | 15.48     | N/A  |
| Air Bags             | 99.95 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78     | 0.0% |
| Emissions Tier I     | 99.95 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78     | 0.0% |
| Emissions Tier II    | 0.00  | 0.00  | 0.00  | 0.00  | 0.05  | 0.90  | 0.99  | 0.99  | 0.98  | 0.98  | 0.97  | 0.96  | 0.95  | 0.94  | 0.94  | 0.93  | 0.92  | 0.91  | 0.90  | 0.90  | 0.89  | 0.88  | 0.88      | N/A  |
| ABS                  | 39.75 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78     | 4.3% |
| Side Impact          | 99.95 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78     | 0.0% |
| Roof Crush           | 0.00  | 0.00  | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78     | N/A  |
| Increase Size/Weight | 26.65 | 33.31 | 36.64 | 39.97 | 43.29 | 46.62 | 49.95 | 53.27 | 56.60 | 59.92 | 63.25 | 66.57 | 69.89 | 73.22 | 76.54 | 79.86 | 83.18 | 86.50 | 89.82 | 93.14 | 96.46 | 99.78 | 99.78     | 6.2% |
| GDI/4-cylinder       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.03  | 0.20  | 0.41  | 0.60  | 0.85  | 1.09  | 1.34  | 1.58  | 1.83  | 2.07  | 2.24  | 2.40  | 2.49  | 2.58  | 2.61  | 2.65  | 2.65      | N/A  |
| GDI/6-cylinder       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.05  | 0.16  | 0.37  | 0.57  | 0.93  | 1.28  | 1.63  | 1.98  | 2.34  | 2.69  | 3.02  | 3.34  | 3.62  | 3.91  | 4.01  | 4.15  | 4.15      | N/A  |
| Gasoline Hybrid      | 0.00  | 0.00  | 0.07  | 0.27  | 0.61  | 1.03  | 1.57  | 2.14  | 2.72  | 3.19  | 3.74  | 4.28  | 4.75  | 5.22  | 5.60  | 5.99  | 6.13  | 6.32  | 6.47  | 6.47  | 6.47  | 6.47  | 6.47      | N/A  |

N/A = Not applicable.

CV I = Continuous Variable Transmission.

OHV = Overhead Camshaft.

4C/4V = 4 Cylinders/4 Valves.

6C/4V = 6 Cylinders/4 Valves.

8C/4V = 8 Cylinders/4 Valves.

4C/5V = 4 Cylinders/5 Valves.

IBI = Inertial Body Fuel Injection.

MPI = Multi Point Fuel Injection.

ACC = Accessory Improvements.

ABS = Anti-Lock Brakes System.

GDI = Gasoline Direct Injection.

ICLU = Torque Converter Lock-up.

WI = Weight Reduction.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 49. Light-Duty Vehicle VMT by Technology Type (1 of 1)**  
(Billion Miles, Unless Otherwise Noted)

1998-

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Conventional Vehicles 1/              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Gasoline ICE Vehicles                 | 2351.6 | 2447.7 | 2499.6 | 2543.6 | 2583.1 | 2625.0 | 2663.8 | 2703.5 | 2743.8 | 2782.1 | 2819.2 | 2856.2 | 2887.1 | 2918.5 | 2953.4 | 2992.5 | 3032.2 | 3064.6 | 3097.2 | 3132.5 | 3169.9 | 3208.5 | 1.4%  |
| TDI Diesel ICE                        | 38.6   | 31.7   | 29.3   | 27.2   | 25.7   | 25.0   | 25.2   | 24.6   | 24.7   | 25.6   | 27.4   | 30.1   | 33.5   | 37.4   | 41.7   | 46.3   | 51.1   | 55.8   | 60.3   | 64.8   | 69.3   | 73.6   | 3.0%  |
| Alternative-Fuel Vehicles             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Alcohol Fuel Technology               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Methanol-Flex Fuel ICE                | 3.4    | 10.5   | 15.5   | 21.0   | 27.0   | 32.7   | 38.1   | 43.1   | 47.6   | 51.7   | 55.3   | 58.3   | 60.7   | 62.7   | 64.3   | 65.5   | 66.3   | 66.9   | 67.3   | 67.4   | 67.4   | 67.1   | 14.5% |
| Methanol ICE                          | 0.0    | 0.0    | 0.0    | 0.1    | 0.1    | 0.1    | 0.2    | 0.3    | 0.5    | 0.8    | 1.2    | 1.7    | 2.4    | 3.2    | 4.0    | 4.9    | 5.9    | 6.8    | 7.8    | 8.6    | 9.5    | 10.2   | 41.2% |
| Ethanol-Flex Fuel ICE                 | 1.9    | 6.2    | 8.9    | 12.0   | 15.2   | 18.8   | 22.3   | 25.9   | 29.2   | 32.2   | 35.1   | 37.6   | 39.6   | 41.1   | 42.4   | 43.3   | 43.9   | 44.1   | 44.1   | 43.9   | 43.6   | 43.1   | 15.1% |
| Ethanol Ice                           | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.1    | 0.1    | 0.2    | 0.3    | 0.4    | 0.6    | 0.8    | 1.0    | 1.3    | 1.7    | 2.0    | 2.4    | 2.8    | 3.1    | 3.4    | 3.7    | 3.9    | 40.3% |
| Natural Gas Technology                |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| CNG ICE                               | 3.1    | 7.9    | 11.5   | 14.9   | 18.2   | 21.2   | 23.9   | 26.2   | 28.2   | 30.1   | 32.0   | 33.8   | 35.5   | 37.1   | 38.7   | 40.3   | 41.8   | 43.0   | 44.2   | 45.2   | 46.2   | 47.1   | 13.2% |
| CNG Bi-fuel                           | 0.2    | 0.5    | 0.7    | 0.9    | 1.2    | 1.4    | 1.7    | 1.9    | 2.1    | 2.3    | 2.4    | 2.5    | 2.6    | 2.6    | 2.7    | 2.7    | 2.7    | 2.6    | 2.6    | 2.5    | 2.4    | 2.3    | 12.6% |
| LPG ICE                               | 3.7    | 5.4    | 6.6    | 7.7    | 8.8    | 9.8    | 10.7   | 11.5   | 12.2   | 12.9   | 13.5   | 14.2   | 14.8   | 15.4   | 15.9   | 16.5   | 17.0   | 17.5   | 17.9   | 18.2   | 18.6   | 18.8   | 7.6%  |
| LPG Bi-fuel                           | 0.1    | 0.3    | 0.5    | 0.6    | 0.8    | 0.9    | 1.1    | 1.2    | 1.3    | 1.4    | 1.5    | 1.5    | 1.5    | 1.6    | 1.5    | 1.5    | 1.5    | 1.4    | 1.4    | 1.3    | 1.3    | 1.2    | 10.8% |
| Electric Technology                   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Electric Vehicle                      | 0.1    | 0.2    | 0.3    | 0.4    | 1.7    | 3.0    | 4.4    | 5.8    | 7.2    | 8.6    | 10.0   | 11.4   | 12.8   | 14.1   | 15.3   | 16.6   | 17.7   | 18.7   | 19.5   | 20.3   | 21.1   | 21.7   | 28.2% |
| Electric-Diesel Hybrid                | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A   |
| Fuel Cell Technology                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Fuel Cell Gasoline                    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A   |
| Fuel Cell Methanol                    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A   |
| Fuel Cell Hydrogen                    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | N/A   |
| VMT Equation Components               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Total VMT (billion miles)             | 2402.8 | 2510.6 | 2572.8 | 2628.5 | 2681.9 | 2738.1 | 2791.5 | 2844.1 | 2897.0 | 2948.1 | 2998.2 | 3048.3 | 3091.5 | 3135.0 | 3181.6 | 3232.1 | 3282.4 | 3324.2 | 3365.2 | 3408.3 | 3452.7 | 3497.6 | 1.7%  |
| VMT/Driving Pop. (thou. miles)        | 11.3   | 11.5   | 11.6   | 11.7   | 11.8   | 12.0   | 12.1   | 12.2   | 12.3   | 12.4   | 12.5   | 12.6   | 12.6   | 12.7   | 12.8   | 12.9   | 13.0   | 13.1   | 13.2   | 13.3   | 13.4   | 13.5   | 0.8%  |
| Driving Population (million)          | 208.6  | 212.8  | 214.9  | 217.0  | 219.2  | 221.4  | 223.7  | 226.0  | 228.4  | 230.7  | 233.0  | 235.2  | 237.4  | 239.5  | 241.5  | 243.6  | 245.6  | 247.6  | 249.5  | 251.5  | 253.4  | 255.3  | 0.9%  |
| Price Effects                         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Motor Gas Price (1987 \$/mill. Btu)   | 6.30   | 7.75   | 7.55   | 7.49   | 7.52   | 7.56   | 7.62   | 7.62   | 7.63   | 7.64   | 7.64   | 7.63   | 7.63   | 7.64   | 7.63   | 7.63   | 7.63   | 7.62   | 7.62   | 7.61   | 7.60   | 7.60   | 0.9%  |
| Fleet Miles per Gallon                | 20.81  | 20.68  | 20.64  | 20.61  | 20.65  | 20.59  | 20.57  | 20.53  | 20.50  | 20.51  | 20.49  | 20.48  | 20.47  | 20.48  | 20.49  | 20.50  | 20.52  | 20.53  | 20.55  | 20.58  | 20.61  | 20.63  | 0.0%  |
| R. Cost of Driving/Mile(1987cent)     | 3.786  | 4.685  | 4.575  | 4.546  | 4.553  | 4.591  | 4.630  | 4.643  | 4.656  | 4.660  | 4.661  | 4.663  | 4.666  | 4.665  | 4.659  | 4.655  | 4.650  | 4.643  | 4.636  | 4.627  | 4.613  | 4.604  | 0.9%  |
| Point Price Elasticity                | -0.035 | -0.042 | -0.041 | -0.040 | -0.040 | -0.040 | -0.040 | -0.040 | -0.039 | -0.039 | -0.039 | -0.039 | -0.038 | -0.038 | -0.038 | -0.037 | -0.037 | -0.037 | -0.037 | -0.036 | -0.036 | -0.035 | 0.1%  |
| Income Effects                        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Disposable Income (bill.1987 \$)      | 4444.6 | 4707.7 | 4820.4 | 4932.6 | 5049.2 | 5190.5 | 5323.0 | 5453.2 | 5585.9 | 5716.7 | 5848.8 | 5986.5 | 6110.1 | 6239.8 | 6385.6 | 6549.2 | 6716.6 | 6860.8 | 7003.3 | 7157.3 | 7318.3 | 7485.5 | 2.4%  |
| Point Income Elasticity               | 0.439  | 0.448  | 0.450  | 0.452  | 0.455  | 0.459  | 0.463  | 0.466  | 0.470  | 0.473  | 0.477  | 0.481  | 0.484  | 0.487  | 0.491  | 0.495  | 0.499  | 0.502  | 0.505  | 0.509  | 0.512  | 0.516  | 0.7%  |
| Demographic Driving Population Effect |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Percentage Female Driving Pop.        | 0.711  | 0.744  | 0.757  | 0.766  | 0.774  | 0.780  | 0.785  | 0.789  | 0.791  | 0.794  | 0.795  | 0.796  | 0.796  | 0.796  | 0.796  | 0.796  | 0.796  | 0.796  | 0.796  | 0.796  | 0.796  | 0.796  | 0.5%  |
| Point Demographic Elasticity          | 0.248  | 0.255  | 0.256  | 0.257  | 0.257  | 0.256  | 0.256  | 0.255  | 0.253  | 0.252  | 0.251  | 0.249  | 0.248  | 0.246  | 0.245  | 0.242  | 0.240  | 0.239  | 0.237  | 0.236  | 0.234  | 0.232  | -0.3% |

1/ Includes personal and fleet vehicles. Includes both cars and light trucks.

TDI = Turbo Direct Injection. Pop. = Population  
 CNG = Compressed natural gas. Thou. = Thousands.  
 LNG = Liquid natural gas. Mill. = Million.  
 VMT = Vehicle miles traveled. \$ = Dollar.  
 ICE = Internal combustion engine. Bill. = Billion.  
 Btu = British thermal unit. R. Cost = Real Cost.  
 N/A = Not applicable.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Federal Highway Administration, Highway Statistics 1996, (November 1997); Oak Ridge National Laboratory, Transportation Energy Data Book: 18, (September 1998); United States Department of Commerce, Bureau of the Census, Truck Inventory and Use Survey, TC92-T-52 (Washington, DC, May 1995); and Energy Information Administration (EIA), AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 50. Summary of New Light-Duty Vehicle Size Class Attributes (1 of 2)**

1998-

|                                      | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Personal Vehicles                    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| New Fuel Efficiency EPA Rated        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Conventional Cars (MPG)              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Minicompact                          | 26.100 | 26.561 | 26.708 | 26.997 | 27.745 | 27.749 | 28.024 | 28.364 | 28.695 | 28.961 | 29.255 | 29.371 | 29.470 | 29.550 | 29.611 | 29.639 | 29.687 | 29.717 | 29.738 | 29.769 | 29.807 | 29.806 | 0.6%  |
| Subcompact                           | 31.811 | 32.383 | 32.484 | 32.624 | 33.261 | 33.255 | 33.302 | 33.461 | 33.622 | 33.792 | 33.995 | 34.073 | 34.210 | 34.241 | 34.188 | 34.079 | 33.985 | 33.930 | 33.883 | 33.831 | 33.756 | 33.658 | 0.3%  |
| Compact                              | 30.657 | 31.352 | 31.410 | 31.605 | 32.497 | 32.464 | 32.526 | 32.719 | 32.948 | 33.190 | 33.360 | 33.543 | 33.777 | 33.811 | 33.776 | 33.695 | 33.622 | 33.592 | 33.565 | 33.515 | 33.454 | 33.389 | 0.4%  |
| Mid-size                             | 27.127 | 27.670 | 27.715 | 27.925 | 28.537 | 28.521 | 28.633 | 28.855 | 29.105 | 29.332 | 29.533 | 29.743 | 29.998 | 30.032 | 30.048 | 30.025 | 29.995 | 29.988 | 29.993 | 29.992 | 29.983 | 29.969 | 0.5%  |
| Large                                | 24.637 | 24.972 | 25.012 | 25.304 | 26.033 | 26.031 | 26.167 | 26.402 | 26.655 | 26.927 | 27.190 | 27.506 | 27.880 | 27.976 | 28.063 | 28.105 | 28.111 | 28.144 | 28.196 | 28.234 | 28.259 | 28.290 | 0.6%  |
| Two Seater                           | 24.826 | 25.247 | 25.352 | 25.557 | 26.179 | 26.175 | 26.324 | 26.560 | 26.800 | 27.009 | 27.219 | 27.303 | 27.406 | 27.451 | 27.469 | 27.447 | 27.437 | 27.434 | 27.431 | 27.429 | 27.420 | 27.387 | 0.4%  |
| Average New Car                      | 28.630 | 29.365 | 29.383 | 29.578 | 30.410 | 30.386 | 30.478 | 30.683 | 30.915 | 31.148 | 31.356 | 31.557 | 31.808 | 31.853 | 31.849 | 31.800 | 31.745 | 31.735 | 31.725 | 31.701 | 31.666 | 31.625 | 0.5%  |
| Avr. New Car On-Road MPG             | 24.654 | 25.093 | 25.081 | 25.246 | 26.026 | 25.974 | 26.053 | 26.195 | 26.361 | 26.559 | 26.702 | 26.806 | 26.985 | 26.992 | 26.921 | 26.848 | 26.767 | 26.691 | 26.646 | 26.592 | 26.565 | 26.500 | 0.3%  |
| Conventional Light Trucks            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Small Pickup                         | 23.768 | 24.161 | 24.107 | 24.162 | 24.323 | 24.225 | 24.142 | 24.169 | 24.230 | 24.121 | 24.133 | 24.223 | 24.337 | 24.447 | 24.544 | 24.611 | 24.680 | 24.757 | 24.843 | 24.946 | 25.061 | 24.994 | 0.2%  |
| Large Pickup                         | 18.516 | 18.490 | 18.454 | 18.482 | 18.597 | 18.505 | 18.575 | 18.740 | 18.861 | 18.843 | 18.951 | 19.131 | 19.307 | 19.484 | 19.620 | 19.753 | 19.882 | 20.025 | 20.176 | 20.337 | 20.506 | 20.473 | 0.5%  |
| Small Van                            | 24.500 | 25.034 | 25.061 | 25.174 | 25.478 | 25.450 | 25.489 | 25.632 | 25.759 | 25.609 | 25.606 | 25.712 | 25.846 | 25.985 | 26.095 | 26.177 | 26.263 | 26.393 | 26.526 | 26.699 | 26.886 | 26.840 | 0.4%  |
| Large Van                            | 18.400 | 18.804 | 18.929 | 19.188 | 19.512 | 19.492 | 19.660 | 19.942 | 20.203 | 20.218 | 20.370 | 20.603 | 20.824 | 21.030 | 21.195 | 21.353 | 21.502 | 21.666 | 21.841 | 22.044 | 22.258 | 22.259 | 0.9%  |
| Small Utility                        | 21.070 | 21.605 | 21.608 | 21.760 | 22.056 | 22.006 | 22.032 | 22.183 | 22.381 | 22.342 | 22.413 | 22.559 | 22.707 | 22.851 | 22.990 | 23.103 | 23.196 | 23.280 | 23.377 | 23.473 | 23.588 | 23.567 | 0.5%  |
| Large Utility                        | 17.159 | 14.586 | 14.636 | 14.791 | 14.989 | 14.998 | 15.127 | 15.337 | 15.528 | 15.555 | 15.688 | 15.886 | 16.065 | 16.198 | 16.306 | 16.409 | 16.511 | 16.620 | 16.740 | 16.854 | 16.996 | 16.980 | 0.0%  |
| Average New Light Truck              | 20.904 | 20.791 | 20.765 | 20.866 | 21.087 | 21.014 | 21.076 | 21.212 | 21.371 | 21.323 | 21.401 | 21.556 | 21.715 | 21.862 | 21.988 | 22.096 | 22.197 | 22.307 | 22.426 | 22.553 | 22.695 | 22.659 | 0.4%  |
| Avr. New LT On-Road MPG              | 17.023 | 16.779 | 16.761 | 16.841 | 17.065 | 16.985 | 17.034 | 17.122 | 17.227 | 17.189 | 17.228 | 17.330 | 17.412 | 17.508 | 17.585 | 17.627 | 17.683 | 17.746 | 17.816 | 17.891 | 17.983 | 17.932 | 0.2%  |
| Degradation Factors 1/               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Cars                                 | 0.861  | 0.855  | 0.854  | 0.854  | 0.856  | 0.855  | 0.855  | 0.854  | 0.853  | 0.853  | 0.852  | 0.849  | 0.848  | 0.847  | 0.845  | 0.844  | 0.843  | 0.841  | 0.840  | 0.839  | 0.839  | 0.838  | -0.1% |
| Light Trucks                         | 0.814  | 0.807  | 0.807  | 0.807  | 0.809  | 0.808  | 0.808  | 0.807  | 0.806  | 0.806  | 0.805  | 0.804  | 0.802  | 0.801  | 0.800  | 0.798  | 0.797  | 0.796  | 0.794  | 0.793  | 0.792  | 0.791  | -0.1% |
| New Fuel Efficiency by Size Class 2/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Alternative-Fuel Cars                |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Minicompact                          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Subcompact                           | 36.088 | 36.677 | 36.744 | 36.874 | 37.540 | 37.479 | 37.510 | 37.672 | 37.853 | 38.076 | 38.341 | 38.506 | 38.745 | 38.850 | 38.821 | 38.718 | 38.614 | 38.547 | 38.495 | 38.428 | 38.334 | 38.214 | 0.3%  |
| Compact                              | 29.942 | 30.562 | 30.576 | 30.725 | 31.551 | 31.482 | 31.533 | 31.718 | 31.940 | 32.183 | 32.376 | 32.576 | 32.832 | 32.827 | 32.818 | 32.753 | 32.689 | 32.649 | 32.612 | 32.551 | 32.474 | 32.384 | 0.4%  |
| Midsized                             | 28.293 | 28.873 | 28.919 | 29.118 | 29.738 | 29.697 | 29.822 | 30.064 | 30.339 | 30.587 | 30.787 | 31.001 | 31.259 | 31.344 | 31.398 | 31.403 | 31.396 | 31.357 | 31.350 | 31.337 | 31.316 | 31.287 | 0.5%  |
| Large                                | 26.555 | 26.893 | 26.928 | 27.224 | 27.976 | 27.989 | 28.152 | 28.418 | 28.712 | 29.024 | 29.337 | 29.710 | 30.138 | 30.361 | 30.571 | 30.708 | 30.747 | 30.785 | 30.843 | 30.883 | 30.916 | 30.953 | 0.7%  |
| 2-Seater                             | 28.977 | 29.478 | 29.737 | 30.195 | 30.872 | 33.434 | 36.774 | 40.999 | 46.400 | 46.201 | 46.036 | 45.906 | 45.777 | 45.659 | 45.531 | 45.368 | 45.658 | 45.542 | 45.436 | 45.378 | 45.311 | 45.251 | 2.0%  |
| Average New Alternative Cars         | 24.976 | 25.414 | 25.484 | 25.689 | 26.279 | 26.680 | 27.299 | 28.145 | 29.207 | 29.345 | 29.479 | 29.616 | 29.792 | 29.840 | 29.857 | 29.825 | 29.851 | 29.813 | 29.789 | 29.763 | 29.725 | 29.682 | 0.8%  |
| Alternative-Fuel Light Trucks        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Small Pickup                         | 24.489 | 24.998 | 24.944 | 25.019 | 25.252 | 25.153 | 25.084 | 25.145 | 25.279 | 25.235 | 25.308 | 25.436 | 25.596 | 25.748 | 25.893 | 26.003 | 26.093 | 26.162 | 26.236 | 26.296 | 26.367 | 26.299 | 0.3%  |
| Large Pickup                         | 18.107 | 18.243 | 18.208 | 18.237 | 18.354 | 18.257 | 18.333 | 18.508 | 18.644 | 18.646 | 18.779 | 18.986 | 19.190 | 19.400 | 19.561 | 19.714 | 19.857 | 20.005 | 20.151 | 20.321 | 20.493 | 20.461 | 0.6%  |
| Small Van                            | 22.159 | 22.648 | 22.621 | 22.720 | 23.025 | 22.956 | 22.952 | 23.084 | 23.279 | 23.275 | 23.392 | 23.554 | 23.740 | 23.914 | 24.079 | 24.211 | 24.321 | 24.414 | 24.495 | 24.561 | 24.634 | 24.590 | 0.5%  |
| Large Van                            | 17.693 | 18.086 | 18.204 | 18.455 | 18.770 | 18.749 | 18.920 | 19.205 | 19.475 | 19.513 | 19.681 | 19.936 | 20.183 | 20.414 | 20.609 | 20.786 | 20.947 | 21.112 | 21.287 | 21.490 | 21.710 | 21.712 | 0.9%  |
| Small Utility                        | 20.597 | 21.098 | 21.087 | 21.229 | 21.528 | 21.455 | 21.467 | 21.601 | 21.789 | 21.783 | 21.869 | 22.015 | 22.168 | 22.314 | 22.455 | 22.570 | 22.670 | 22.746 | 22.825 | 22.902 | 22.994 | 22.976 | 0.5%  |
| Large Utility                        | 16.008 | 16.345 | 16.396 | 16.568 | 16.791 | 16.791 | 16.936 | 17.171 | 17.385 | 17.409 | 17.558 | 17.778 | 17.979 | 18.130 | 18.250 | 18.365 | 18.478 | 18.598 | 18.734 | 18.861 | 19.018 | 18.999 | 0.8%  |
| Average New Alt. Light Trucks        | 19.842 | 20.236 | 20.243 | 20.371 | 20.620 | 20.560 | 20.615 | 20.786 | 20.975 | 20.977 | 21.098 | 21.284 | 21.476 | 21.653 | 21.808 | 21.941 | 22.061 | 22.173 | 22.288 | 22.405 | 22.536 | 22.506 | 0.6%  |
| Fleet Vehicles                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| New Fuel Efficiency EPA Rated        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Cars                                 | 26.714 | 27.276 | 27.355 | 27.584 | 28.230 | 28.217 | 28.338 | 28.563 | 28.812 | 29.049 | 29.269 | 29.506 | 29.791 | 29.849 | 29.888 | 29.884 | 29.860 | 29.861 | 29.876 | 29.882 | 29.879 | 29.873 | 0.5%  |
| Light Trucks                         | 19.943 | 20.296 | 20.342 | 20.513 | 20.785 | 20.742 | 20.844 | 21.058 | 21.261 | 21.236 | 21.341 | 21.527 | 21.710 | 21.887 | 22.034 | 22.166 | 22.289 | 22.424 | 22.570 | 22.734 | 22.911 | 22.901 | 0.6%  |
| Average On Road MPG                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Cars                                 | 22.622 | 22.900 | 23.091 | 23.286 | 23.641 | 23.834 | 24.050 | 24.222 | 24.328 | 24.503 | 24.667 | 24.807 | 24.982 | 25.124 | 25.193 | 25.246 | 25.234 | 25.175 | 25.143 | 25.112 | 25.119 | 25.091 | 0.5%  |
| Light Trucks                         | 15.761 | 15.970 | 16.184 | 16.322 | 16.502 | 16.590 | 16.682 | 16.772 | 16.869 | 16.946 | 17.015 | 17.101 | 17.163 | 17.246 | 17.347 | 17.434 | 17.534 | 17.622 | 17.705 | 17.790 | 17.886 | 17.961 | 0.6%  |

**Table 50. Summary of New Light-Duty Vehicle Size Class Attributes (2 of 2)**

|   | 1998    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 1998-2020 |       |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------|
| <b>New Vehicle Sales Shares (percent)</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |       |
| <b>Conventional Cars</b>                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |       |
| Minicompact                               | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.004   | 0.005   | 0.005   | 0.005   | 0.005   | 0.005   | 0.005   | 0.005   | 0.005     | 0.6%  |
| Subcompact                                | 0.167   | 0.172   | 0.168   | 0.167   | 0.165   | 0.163   | 0.162   | 0.161   | 0.159   | 0.158   | 0.157   | 0.156   | 0.155   | 0.154   | 0.153   | 0.152   | 0.151   | 0.150   | 0.149   | 0.148   | 0.147   | 0.146   | 0.146     | -0.6% |
| Compact                                   | 0.358   | 0.393   | 0.389   | 0.389   | 0.389   | 0.391   | 0.393   | 0.393   | 0.393   | 0.394   | 0.394   | 0.394   | 0.394   | 0.394   | 0.394   | 0.393   | 0.394   | 0.394   | 0.394   | 0.394   | 0.394   | 0.394   | 0.394     | 0.4%  |
| Mid-Size                                  | 0.341   | 0.308   | 0.312   | 0.314   | 0.313   | 0.312   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311   | 0.311     | -0.4% |
| Large                                     | 0.123   | 0.115   | 0.118   | 0.119   | 0.120   | 0.121   | 0.122   | 0.123   | 0.124   | 0.125   | 0.126   | 0.127   | 0.128   | 0.129   | 0.130   | 0.131   | 0.133   | 0.134   | 0.134   | 0.135   | 0.136   | 0.137   | 0.137     | 0.5%  |
| Two Seater                                | 0.007   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008   | 0.008     | 0.5%  |
| <b>Conventional Light Trucks</b>          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |       |
| Small Pickup                              | 0.172   | 0.154   | 0.154   | 0.154   | 0.153   | 0.149   | 0.147   | 0.147   | 0.147   | 0.146   | 0.145   | 0.145   | 0.144   | 0.144   | 0.143   | 0.143   | 0.142   | 0.141   | 0.140   | 0.139   | 0.138   | 0.138   | 0.138     | -1.0% |
| Large Pickup                              | 0.210   | 0.204   | 0.201   | 0.200   | 0.198   | 0.194   | 0.193   | 0.192   | 0.191   | 0.190   | 0.189   | 0.188   | 0.187   | 0.187   | 0.186   | 0.185   | 0.184   | 0.183   | 0.182   | 0.180   | 0.179   | 0.178   | 0.178     | -0.8% |
| Small Van                                 | 0.192   | 0.216   | 0.211   | 0.210   | 0.210   | 0.207   | 0.209   | 0.209   | 0.209   | 0.209   | 0.210   | 0.210   | 0.210   | 0.210   | 0.210   | 0.209   | 0.209   | 0.209   | 0.208   | 0.207   | 0.206   | 0.206   | 0.206     | 0.3%  |
| Large Van                                 | 0.020   | 0.019   | 0.019   | 0.019   | 0.018   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.017   | 0.016   | 0.016     | -0.9% |
| Small Utility                             | 0.309   | 0.309   | 0.315   | 0.317   | 0.319   | 0.327   | 0.328   | 0.329   | 0.330   | 0.331   | 0.332   | 0.333   | 0.334   | 0.335   | 0.336   | 0.338   | 0.340   | 0.341   | 0.343   | 0.345   | 0.348   | 0.350   | 0.350     | 0.6%  |
| Large Utility                             | 0.097   | 0.098   | 0.100   | 0.101   | 0.102   | 0.105   | 0.105   | 0.105   | 0.106   | 0.106   | 0.106   | 0.107   | 0.107   | 0.107   | 0.108   | 0.108   | 0.109   | 0.109   | 0.110   | 0.111   | 0.112   | 0.112   | 0.112     | 0.7%  |
| <b>New Vehicle Average Horse Power</b>    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |       |
| <b>Conventional Cars</b>                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |       |
| Minicompact                               | 194.901 | 198.484 | 202.467 | 206.056 | 207.351 | 211.521 | 215.644 | 219.400 | 222.953 | 225.608 | 228.468 | 231.121 | 233.216 | 235.497 | 237.847 | 240.677 | 243.312 | 245.694 | 248.257 | 250.375 | 252.831 | 255.316 | 255.316   | 1.2%  |
| Subcompact                                | 140.203 | 133.076 | 136.683 | 141.083 | 145.146 | 146.804 | 151.784 | 156.665 | 161.484 | 165.921 | 170.496 | 174.973 | 178.719 | 182.429 | 186.251 | 190.509 | 194.446 | 197.822 | 201.118 | 204.251 | 207.587 | 210.876 | 210.876   | 1.9%  |
| Compact                                   | 174.408 | 132.616 | 136.340 | 140.472 | 144.726 | 146.887 | 151.607 | 156.268 | 160.864 | 165.135 | 169.344 | 173.584 | 177.210 | 180.682 | 184.445 | 188.760 | 192.668 | 196.084 | 199.253 | 202.205 | 205.315 | 208.428 | 208.428   | 0.8%  |
| Mid-Size                                  | 193.367 | 168.139 | 172.357 | 176.824 | 180.355 | 183.453 | 188.465 | 193.349 | 198.172 | 202.620 | 207.002 | 211.404 | 215.075 | 218.439 | 222.124 | 226.337 | 230.111 | 233.401 | 236.489 | 239.543 | 242.753 | 245.959 | 245.959   | 1.1%  |
| Large                                     | 207.570 | 216.194 | 220.529 | 225.279 | 230.245 | 234.015 | 238.919 | 243.624 | 248.214 | 252.759 | 257.264 | 261.823 | 266.017 | 269.727 | 273.862 | 278.241 | 281.950 | 285.254 | 288.206 | 291.318 | 294.438 | 297.506 | 297.506   | 1.6%  |
| Two Seater                                | 169.880 | 235.616 | 240.788 | 246.318 | 250.873 | 255.189 | 261.279 | 267.059 | 272.718 | 277.620 | 282.695 | 287.515 | 291.470 | 295.408 | 299.428 | 303.855 | 307.994 | 311.653 | 315.382 | 318.774 | 322.560 | 326.396 | 326.396   | 3.0%  |
| Average New Car                           | 179.298 | 154.358 | 158.672 | 163.193 | 167.327 | 170.013 | 174.912 | 179.774 | 184.559 | 189.030 | 193.488 | 197.947 | 201.753 | 205.334 | 209.228 | 213.615 | 217.548 | 220.989 | 224.197 | 227.305 | 230.563 | 233.808 | 233.808   | 1.2%  |
| <b>Conventional Light Trucks</b>          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |       |
| Small Pickup                              | 175.212 | 144.296 | 150.316 | 157.396 | 163.849 | 165.631 | 174.437 | 183.413 | 192.008 | 196.635 | 201.594 | 206.671 | 211.129 | 215.745 | 220.670 | 225.903 | 230.727 | 234.739 | 238.420 | 242.050 | 245.873 | 249.470 | 249.470   | 1.6%  |
| Large Pickup                              | 222.889 | 227.521 | 234.372 | 241.234 | 247.374 | 251.368 | 260.180 | 268.913 | 277.692 | 282.987 | 289.119 | 295.280 | 300.601 | 305.900 | 310.759 | 315.980 | 320.657 | 324.877 | 328.910 | 332.753 | 336.622 | 340.158 | 340.158   | 1.9%  |
| Small Van                                 | 204.945 | 169.589 | 177.059 | 184.347 | 190.285 | 194.075 | 203.460 | 212.986 | 222.151 | 227.356 | 232.898 | 238.774 | 244.208 | 249.817 | 255.911 | 262.309 | 268.210 | 273.158 | 277.691 | 282.180 | 286.742 | 290.847 | 290.847   | 1.6%  |
| Large Van                                 | 211.509 | 222.753 | 227.833 | 232.691 | 236.779 | 240.111 | 246.349 | 252.342 | 258.191 | 262.138 | 266.927 | 271.767 | 275.998 | 280.604 | 284.691 | 288.873 | 292.681 | 296.102 | 299.377 | 302.492 | 305.485 | 308.119 | 308.119   | 1.7%  |
| Small Utility                             | 205.535 | 180.472 | 187.600 | 194.736 | 200.905 | 205.104 | 213.682 | 222.272 | 230.407 | 235.389 | 240.419 | 245.719 | 250.221 | 254.933 | 259.943 | 265.270 | 269.981 | 274.166 | 278.023 | 281.869 | 285.925 | 289.693 | 289.693   | 1.6%  |
| Large Utility                             | 226.004 | 197.494 | 204.533 | 211.182 | 216.941 | 221.368 | 229.625 | 237.687 | 245.469 | 250.340 | 255.620 | 260.920 | 265.576 | 270.237 | 274.915 | 279.980 | 284.573 | 288.720 | 292.634 | 296.420 | 300.188 | 303.541 | 303.541   | 1.3%  |
| Average New Light Truck                   | 205.968 | 184.627 | 191.518 | 198.484 | 204.532 | 208.260 | 216.986 | 225.715 | 234.147 | 239.141 | 244.472 | 249.993 | 254.839 | 259.818 | 264.953 | 270.408 | 275.324 | 279.622 | 283.610 | 287.519 | 291.544 | 295.230 | 295.230   | 1.6%  |

1/ Conversion factor used to convert Environmental Protection Agency rated to "on road" miles per gallon.

2/ Environmental Protection Agency rated miles per gallon.

MPG = Miles per gallon.

EPA = Environmental Protection Agency.

N/A = Not applicable.

Avr. = Average.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998

are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy

Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration,

Mid-Year Fuel Economy Reports from Auto Manufacturers, 1998; Federal Highway Administration, Highway Statistics 1997, (November 1998); Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating

Characteristics, and Fueling Practices," prepared for the U.S. Department of Energy, Office of Transportation Technologies, and Office of Policy (March 1992); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections:

EIA, AEO99 National Energy Modeling System run AEO2K.D100199A.

**Table 51. Transportation Fleet Car and Truck Fuel Consumption by Type and Technology (1 of 1)**  
(Trillion Btu)

1998-

|                            | 1998    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2020  |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Cars 1/                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Gasoline Conventional      | 1099.82 | 1021.19 | 978.53  | 930.99  | 879.17  | 861.28  | 854.13  | 852.49  | 850.10  | 841.38  | 830.89  | 825.40  | 819.12  | 814.50  | 815.72  | 821.45  | 833.85  | 845.13  | 850.33  | 849.82  | 846.48  | 849.12  | -1.2% |
| Distillate                 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Methanol                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 0.32    | 0.83    | 1.25    | 1.61    | 1.91    | 2.13    | 2.24    | 2.24    | 2.23    | 2.22    | 2.20    | 2.19    | 2.17    | 2.15    | 2.16    | 2.17    | 2.19    | 2.21    | 2.23    | 2.24    | 2.24    | 2.25    | 9.2%  |
| Ethanol                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 0.04    | 0.10    | 0.15    | 0.19    | 0.22    | 0.25    | 0.27    | 0.27    | 0.26    | 0.26    | 0.26    | 0.26    | 0.26    | 0.25    | 0.25    | 0.26    | 0.26    | 0.26    | 0.26    | 0.27    | 0.27    | 0.27    | 9.4%  |
| CNG                        | 7.62    | 20.67   | 29.70   | 37.89   | 44.68   | 49.45   | 51.86   | 52.27   | 52.12   | 51.92   | 51.67   | 51.39   | 50.95   | 50.58   | 50.51   | 50.67   | 51.04   | 51.43   | 51.76   | 52.05   | 52.18   | 52.33   | 9.2%  |
| CNG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| LPG                        | 5.41    | 10.03   | 13.15   | 15.98   | 18.29   | 19.94   | 20.78   | 20.95   | 20.89   | 20.79   | 20.68   | 20.57   | 20.40   | 20.25   | 20.22   | 20.29   | 20.45   | 20.61   | 20.74   | 20.85   | 20.89   | 20.96   | 6.3%  |
| LPG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Electric                   | 0.22    | 0.60    | 0.84    | 1.06    | 1.24    | 1.33    | 1.34    | 1.29    | 1.19    | 1.09    | 1.02    | 0.96    | 0.92    | 0.91    | 0.91    | 0.92    | 0.94    | 0.95    | 0.96    | 0.97    | 0.97    | 0.98    | 7.0%  |
| Electric-Diesel Hybrid     | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Fuel Cell Gasoline         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Methanol         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Hydrogen         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Total Fleet Cars           | 1113.43 | 1053.42 | 1023.62 | 987.73  | 945.51  | 934.38  | 930.62  | 929.51  | 926.79  | 917.67  | 906.72  | 900.77  | 893.81  | 888.64  | 889.77  | 895.75  | 908.73  | 920.59  | 926.29  | 926.19  | 923.02  | 925.89  | -0.8% |
| Light Trucks 1/            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Gasoline Conventional      | 1617.83 | 1688.69 | 1686.20 | 1671.40 | 1648.07 | 1637.24 | 1653.30 | 1673.73 | 1693.61 | 1708.00 | 1715.12 | 1718.31 | 1721.93 | 1723.88 | 1729.11 | 1743.78 | 1759.42 | 1772.08 | 1780.79 | 1782.18 | 1776.23 | 1771.87 | 0.4%  |
| Distillate                 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Methanol                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 0.68    | 1.78    | 2.74    | 3.69    | 4.52    | 5.29    | 5.91    | 6.26    | 6.32    | 6.37    | 6.42    | 6.45    | 6.45    | 6.44    | 6.46    | 6.51    | 6.56    | 6.59    | 6.61    | 6.63    | 6.63    | 6.62    | 10.9% |
| Ethanol                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 0.09    | 0.24    | 0.38    | 0.51    | 0.63    | 0.74    | 0.83    | 0.88    | 0.88    | 0.89    | 0.90    | 0.90    | 0.90    | 0.90    | 0.90    | 0.91    | 0.92    | 0.92    | 0.92    | 0.93    | 0.93    | 0.93    | 11.0% |
| CNG                        | 9.34    | 24.56   | 37.08   | 49.16   | 59.28   | 68.43   | 75.47   | 79.44   | 80.24   | 80.97   | 81.57   | 81.87   | 81.97   | 82.04   | 82.39   | 83.12   | 83.91   | 84.43   | 84.86   | 85.16   | 85.24   | 85.14   | 10.6% |
| CNG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| LPG                        | 7.14    | 12.29   | 16.25   | 19.97   | 22.99   | 25.70   | 27.84   | 29.06   | 29.35   | 29.61   | 29.80   | 29.88   | 29.92   | 29.94   | 30.05   | 30.31   | 30.60   | 30.79   | 30.95   | 31.04   | 31.04   | 30.98   | 6.9%  |
| LPG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Electric                   | 0.13    | 0.33    | 0.46    | 0.58    | 0.66    | 0.70    | 0.71    | 0.68    | 0.63    | 0.59    | 0.56    | 0.54    | 0.53    | 0.53    | 0.54    | 0.55    | 0.57    | 0.58    | 0.59    | 0.60    | 0.60    | 0.61    | 7.1%  |
| Electric-Diesel Hybrid     | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Fuel Cell Gasoline         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Methanol         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Hydrogen         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Total Fleet Light Trucks   | 1635.22 | 1727.88 | 1743.10 | 1745.32 | 1736.15 | 1738.10 | 1764.05 | 1790.04 | 1811.04 | 1826.44 | 1834.36 | 1837.95 | 1841.69 | 1843.73 | 1849.47 | 1865.19 | 1881.97 | 1895.40 | 1904.73 | 1906.53 | 1900.66 | 1896.15 | 0.7%  |
| Total Fleet Vehicles       | 2748.65 | 2781.31 | 2766.72 | 2733.04 | 2681.66 | 2672.48 | 2694.67 | 2719.55 | 2737.83 | 2744.11 | 2741.08 | 2738.72 | 2735.50 | 2732.37 | 2739.23 | 2760.94 | 2790.70 | 2815.99 | 2831.02 | 2832.72 | 2823.69 | 2822.04 | 0.1%  |
| Commercial Light Trucks 2/ | 612.81  | 623.48  | 631.41  | 642.33  | 652.28  | 662.80  | 673.12  | 681.61  | 690.25  | 698.51  | 705.59  | 714.04  | 719.98  | 727.51  | 736.72  | 747.23  | 757.35  | 762.90  | 769.65  | 777.11  | 785.19  | 793.22  | 1.2%  |

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

ICE = Internal combustion engine.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

N/A = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis, March 1992; Bobit Publishing Company, Fleet Fact Book, Redondo Beach, California, various issues; United States Department of Commerce, Bureau of the Census, "Trucks Inventory and Use Survey," IC92-1-52, (Washington, DC, May 1995); Federal Highway Administration, Highway Statistics 1997 (November 1998); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, prepared for the Energy Information Administration (EIA) (April 23, 1997); and EIA AE02K.D100199A. Projections: EIA, AE02000 National Energy Modeling System run AE02K.D100199A.

**Table 52. Transportation Fleet Car and Truck Sales by Type and Technology (Thousands) (1 of 1)**

1998-

|                            | 1998    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2020  |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Cars 1/                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Gasoline Conventional      | 1884.02 | 1694.38 | 1636.28 | 1612.82 | 1630.48 | 1657.07 | 1676.42 | 1659.29 | 1643.83 | 1638.95 | 1638.71 | 1653.99 | 1641.70 | 1640.00 | 1666.74 | 1710.68 | 1737.18 | 1716.83 | 1702.42 | 1699.11 | 1710.67 | 1730.56 | -0.4% |
| Distillate                 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Methanol                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 4.67    | 10.98   | 14.58   | 14.37   | 14.52   | 14.76   | 14.93   | 14.78   | 14.64   | 14.60   | 14.60   | 14.73   | 14.62   | 14.61   | 14.85   | 15.24   | 15.47   | 15.29   | 15.16   | 15.13   | 15.24   | 15.42   | 5.6%  |
| Ethanol                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 0.49    | 1.23    | 1.70    | 1.68    | 1.70    | 1.73    | 1.75    | 1.73    | 1.71    | 1.71    | 1.71    | 1.72    | 1.71    | 1.71    | 1.74    | 1.78    | 1.81    | 1.79    | 1.77    | 1.77    | 1.78    | 1.80    | 6.1%  |
| CNG                        | 31.59   | 64.63   | 77.90   | 76.79   | 77.63   | 78.89   | 79.81   | 79.00   | 78.26   | 78.03   | 78.02   | 78.75   | 78.16   | 78.08   | 79.35   | 81.44   | 82.71   | 81.74   | 81.05   | 80.89   | 81.44   | 82.39   | 4.5%  |
| CNG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| LPG                        | 16.53   | 27.50   | 31.56   | 31.10   | 31.44   | 31.96   | 32.33   | 32.00   | 31.70   | 31.61   | 31.60   | 31.90   | 31.66   | 31.63   | 32.14   | 32.99   | 33.50   | 33.11   | 32.83   | 32.77   | 32.99   | 33.37   | 3.2%  |
| LPG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Electric                   | 1.09    | 2.00    | 2.22    | 2.19    | 2.22    | 2.25    | 2.28    | 2.26    | 2.24    | 2.23    | 2.23    | 2.25    | 2.23    | 2.23    | 2.27    | 2.33    | 2.36    | 2.33    | 2.31    | 2.31    | 2.31    | 2.33    | 3.6%  |
| Electric-Diesel Hybrid     | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Fuel Cell Gasoline         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Methanol         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Hydrogen         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Total Fleet Cars           | 1938.39 | 1800.72 | 1764.24 | 1738.95 | 1757.99 | 1786.66 | 1807.52 | 1789.05 | 1772.38 | 1767.12 | 1766.86 | 1783.34 | 1770.09 | 1768.25 | 1797.08 | 1844.46 | 1873.03 | 1851.10 | 1835.56 | 1831.99 | 1844.44 | 1865.90 | -0.2% |
| Light Trucks 1/            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Gasoline Conventional      | 1798.77 | 1714.02 | 1697.90 | 1713.55 | 1767.44 | 1827.18 | 1875.56 | 1879.46 | 1881.62 | 1892.89 | 1907.07 | 1937.37 | 1933.61 | 1940.69 | 1980.23 | 2039.36 | 2076.96 | 2057.70 | 2044.71 | 2044.38 | 2061.41 | 2088.09 | 0.7%  |
| Distillate                 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Methanol                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 5.62    | 14.72   | 20.71   | 20.90   | 21.56   | 22.29   | 22.88   | 22.93   | 22.95   | 23.09   | 23.26   | 23.63   | 23.59   | 23.67   | 24.15   | 24.88   | 25.33   | 25.10   | 24.94   | 24.94   | 25.14   | 25.47   | 7.1%  |
| Ethanol                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 0.73    | 1.95    | 2.78    | 2.80    | 2.89    | 2.99    | 3.07    | 3.07    | 3.08    | 3.09    | 3.12    | 3.17    | 3.16    | 3.17    | 3.24    | 3.33    | 3.40    | 3.36    | 3.34    | 3.34    | 3.37    | 3.41    | 7.3%  |
| CNG                        | 20.64   | 50.09   | 67.53   | 68.15   | 70.30   | 72.67   | 74.60   | 74.75   | 74.84   | 75.29   | 75.85   | 77.06   | 76.91   | 77.19   | 78.76   | 81.11   | 82.61   | 81.84   | 81.32   | 81.31   | 81.99   | 83.05   | 6.5%  |
| CNG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| LPG                        | 11.12   | 19.81   | 24.81   | 25.04   | 25.83   | 26.70   | 27.41   | 27.46   | 27.49   | 27.66   | 27.87   | 28.31   | 28.25   | 28.36   | 28.93   | 29.80   | 30.35   | 30.07   | 29.88   | 29.87   | 30.12   | 30.51   | 4.7%  |
| LPG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Electric                   | 0.38    | 0.73    | 0.86    | 0.87    | 0.89    | 0.92    | 0.95    | 0.95    | 0.95    | 0.96    | 0.96    | 0.98    | 0.98    | 0.98    | 1.00    | 1.03    | 1.05    | 1.04    | 1.03    | 1.03    | 1.04    | 1.06    | 4.8%  |
| Electric-Diesel Hybrid     | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Fuel Cell Gasoline         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Methanol         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Hydrogen         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Total Fleet Light Trucks   | 1837.27 | 1801.32 | 1814.58 | 1831.31 | 1888.90 | 1952.75 | 2004.45 | 2008.62 | 2010.93 | 2022.98 | 2038.14 | 2070.52 | 2066.49 | 2074.06 | 2116.32 | 2179.52 | 2219.69 | 2199.11 | 2185.23 | 2184.88 | 2203.08 | 2231.59 | 0.9%  |
| Total Fleet Vehicles       | 3775.66 | 3602.04 | 3578.82 | 3570.26 | 3646.90 | 3739.41 | 3811.97 | 3797.67 | 3783.31 | 3790.09 | 3804.99 | 3853.86 | 3836.58 | 3842.31 | 3913.40 | 4023.98 | 4092.73 | 4050.21 | 4020.79 | 4016.87 | 4047.52 | 4097.49 | 0.4%  |
| Commercial Light Trucks 2/ | 919.55  | 901.21  | 909.20  | 918.94  | 949.50  | 983.30  | 1010.75 | 1013.89 | 1016.01 | 1022.85 | 1031.65 | 1049.26 | 1047.99 | 1052.49 | 1074.50 | 1107.60 | 1128.76 | 1118.52 | 1111.49 | 1111.36 | 1120.91 | 1135.92 | 1.0%  |

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

ICE = Internal combustion engine.

CNG = Compressed natural gas.

LNG = Liquid petroleum gas.

N/A = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis, March 1992; Bobit Publishing Company, Fleet Fact Book, Redondo Beach, California, various issues; United States Department of Commerce, Bureau of the Census, "Truck Inventory and Use Survey," IC92-1-52, (Washington, DC, May 1995); Federal Highway Administration, Highway Statistics 1997 (November 1998); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the LI Commercial Truck Model, Final Report, Subtask 19-2, prepared for the Energy Information Administration (EIA) (April 23, 1997); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AE-U2000 National Energy Modeling System run AE-U2K.D100199A. Projections: EIA, AE-U2000 National Energy Modeling System run AE-U2K.D100199A.

**Table 53. Transportation Fleet Car and Truck Stock by Type and Technology (Thousands) (1 of 1)**

1998-

|                            | 1998    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2020    |       |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Cars 1/                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Gasoline Conventional      | 7897.06 | 7448.88 | 7181.26 | 6878.93 | 6587.59 | 6494.21 | 6491.26 | 6525.95 | 6537.22 | 6520.02 | 6485.89 | 6481.36 | 6478.34 | 6478.50 | 6505.58 | 6564.00 | 6657.72 | 6730.17 | 6762.93 | 6752.91 | 6730.87 | 6745.01 | -0.7%   |       |
| Distillate                 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Methanol                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 10.13   | 26.65   | 40.15   | 51.86   | 62.16   | 69.76   | 73.92   | 74.33   | 74.56   | 74.65   | 74.52   | 74.35   | 74.18   | 74.13   | 74.37   | 75.00   | 75.76   | 76.41   | 76.94   | 77.24   | 77.30   | 77.28   | 77.28   | 9.7%  |
| Ethanol                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 1.10    | 2.92    | 4.50    | 5.85    | 7.03    | 7.93    | 8.43    | 8.45    | 8.49    | 8.49    | 8.47    | 8.45    | 8.43    | 8.43    | 8.46    | 8.53    | 8.62    | 8.70    | 8.76    | 8.79    | 8.79    | 8.79    | 8.79    | 9.9%  |
| CNG                        | 60.09   | 164.48  | 236.99  | 303.72  | 361.69  | 401.48  | 422.87  | 427.97  | 428.78  | 429.57  | 429.37  | 428.85  | 427.61  | 427.03  | 428.22  | 431.62  | 435.98  | 439.18  | 442.00  | 444.13  | 445.23  | 445.65  | 445.65  | 9.5%  |
| CNG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| LPG                        | 41.50   | 77.88   | 102.53  | 125.31  | 144.96  | 158.59  | 166.02  | 168.11  | 168.39  | 168.63  | 168.49  | 168.33  | 167.87  | 167.66  | 168.14  | 169.48  | 171.27  | 172.57  | 173.62  | 174.36  | 174.73  | 174.95  | 174.95  | 6.8%  |
| LPG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Electric                   | 1.99    | 5.32    | 7.36    | 9.34    | 11.04   | 12.14   | 12.72   | 12.93   | 12.95   | 12.98   | 12.98   | 12.98   | 12.93   | 12.91   | 12.94   | 13.04   | 13.17   | 13.26   | 13.33   | 13.41   | 13.46   | 13.48   | 13.48   | 9.1%  |
| Electric-Diesel Hybrid     | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Fuel Cell Gasoline         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Methanol         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Hydrogen         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Total Fleet Cars           | 8011.87 | 7726.13 | 7572.79 | 7375.01 | 7174.46 | 7144.10 | 7175.22 | 7217.75 | 7230.38 | 7214.34 | 7179.72 | 7174.32 | 7169.37 | 7168.66 | 7197.71 | 7261.67 | 7362.52 | 7440.28 | 7477.59 | 7470.84 | 7450.38 | 7465.17 | 7465.17 | -0.3% |
| Light Trucks 1/            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Gasoline Conventional      | 8101.4  | 8616.5  | 8712.2  | 8706.6  | 8678.3  | 8652.9  | 8772.7  | 8924.6  | 9085.1  | 9207.3  | 9287.8  | 9353.4  | 9406.7  | 9463.6  | 9549.2  | 9679.7  | 9821.0  | 9940.9  | 10038.3 | 10099.0 | 10124.0 | 10141.1 | 10141.1 | 1.0%  |
| Distillate                 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Methanol                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 13.50   | 35.26   | 54.73   | 74.12   | 91.75   | 107.93  | 121.00  | 128.91  | 131.11  | 133.23  | 134.87  | 136.17  | 136.87  | 137.60  | 138.79  | 140.56  | 142.60  | 144.05  | 145.38  | 146.59  | 147.53  | 148.10  | 148.10  | 11.5% |
| Ethanol                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Flex                       | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Neat                       | 1.76    | 4.64    | 7.26    | 9.88    | 12.27   | 14.49   | 16.29   | 17.38   | 17.67   | 17.96   | 18.18   | 18.36   | 18.46   | 18.55   | 18.71   | 18.95   | 19.23   | 19.42   | 19.60   | 19.76   | 19.89   | 19.97   | 19.97   | 11.7% |
| CNG                        | 46.20   | 122.11  | 185.38  | 247.24  | 301.31  | 348.93  | 386.54  | 408.96  | 416.03  | 422.58  | 427.52  | 431.44  | 433.70  | 436.09  | 439.87  | 445.54  | 451.99  | 456.77  | 461.05  | 464.74  | 467.39  | 468.99  | 468.99  | 11.1% |
| CNG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| LPG                        | 34.36   | 59.23   | 78.58   | 97.11   | 113.00  | 126.75  | 137.92  | 144.70  | 147.23  | 149.47  | 151.10  | 152.40  | 153.21  | 154.08  | 155.43  | 157.47  | 159.75  | 161.50  | 163.04  | 164.26  | 165.06  | 165.55  | 165.55  | 7.4%  |
| LPG Bi-fuel                | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Electric                   | 0.80    | 1.94    | 2.71    | 3.41    | 3.93    | 4.31    | 4.57    | 4.71    | 4.79    | 4.86    | 4.90    | 4.94    | 4.97    | 5.00    | 5.04    | 5.11    | 5.18    | 5.25    | 5.30    | 5.33    | 5.35    | 5.36    | 5.36    | 9.0%  |
| Electric-Diesel Hybrid     | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell                  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Fuel Cell Gasoline         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Methanol         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Fuel Cell Hydrogen         | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Total Fleet Light Trucks   | 8198.0  | 8839.7  | 9040.8  | 9138.4  | 9200.5  | 9255.3  | 9439.0  | 9629.3  | 9801.9  | 9935.4  | 10024.4 | 10096.7 | 10153.9 | 10214.9 | 10307.1 | 10447.3 | 10599.8 | 10727.9 | 10832.6 | 10899.7 | 10929.2 | 10949.1 | 10949.1 | 1.3%  |
| Total Fleet Vehicles       | 16209.9 | 16565.9 | 16613.6 | 16513.4 | 16375.0 | 16399.4 | 16614.3 | 16847.0 | 17032.3 | 17149.8 | 17204.1 | 17271.0 | 17323.3 | 17383.6 | 17504.8 | 17709.0 | 17962.3 | 18168.1 | 18310.2 | 18370.5 | 18379.6 | 18414.2 | 18414.2 | 0.6%  |
| Commercial Light Trucks 2/ |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
|                            | 9881.3  | 10387.3 | 10594.1 | 10796.8 | 11016.2 | 11254.7 | 11504.4 | 11740.4 | 11962.6 | 12176.6 | 12384.9 | 12596.8 | 12793.1 | 12980.6 | 13177.4 | 13394.0 | 13617.1 | 13815.0 | 13992.4 | 14157.7 | 14321.3 | 14489.0 | 14489.0 | 1.8%  |

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

CNG = Compressed natural gas.

LNG = Liquid petroleum gas.

ICE = Internal combustion engine.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis, March 1992; Bobit Publishing Company, Fleet Fact Book, Redondo Beach, California, various issues; United States Department of Commerce, Bureau of the Census, "Truck Inventory and Use Survey," IC92-1-52, (Washington, DC, May 1995); Federal Highway Administration, Highway Statistics 1997, (November 1998); Decision Analysis Corporation of Virginia, NEIMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, (April 23, 1997); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AE02000 National Energy Modeling System run AE02K.D100199A. Projections: EIA, AE02000 National Energy Modeling System run AE02K.D100199A.

**Table 54. Transportation Fleet Car and Truck VMT by Type and Technology (1 of 1)**  
(Billion Miles)

1998-

|                            | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2020  |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Cars 1/                    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Gasoline Conventional      | 203.18 | 191.20 | 184.19 | 176.22 | 168.54 | 166.20 | 166.21 | 167.10 | 167.34 | 166.81 | 165.85 | 165.70 | 165.62 | 165.62 | 166.31 | 167.80 | 170.22 | 172.09 | 172.91 | 172.58 | 171.95 | 172.31 | -0.7% |
| Distillate                 | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Methanol                   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Flex                       | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Neat                       | 0.26   | 0.68   | 1.03   | 1.33   | 1.59   | 1.79   | 1.89   | 1.90   | 1.91   | 1.91   | 1.91   | 1.90   | 1.90   | 1.90   | 1.90   | 1.92   | 1.94   | 1.95   | 1.97   | 1.97   | 1.97   | 1.97   | 9.6%  |
| Ethanol                    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Flex                       | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Neat                       | 0.03   | 0.07   | 0.12   | 0.15   | 0.18   | 0.20   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 9.9%  |
| CNG                        | 1.55   | 4.22   | 6.08   | 7.78   | 9.25   | 10.27  | 10.83  | 10.96  | 10.98  | 10.99  | 10.98  | 10.96  | 10.93  | 10.92  | 10.95  | 11.03  | 11.15  | 11.23  | 11.30  | 11.35  | 11.37  | 11.38  | 9.5%  |
| CNG Bi-fuel                | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| LPG                        | 1.07   | 2.00   | 2.63   | 3.21   | 3.71   | 4.06   | 4.25   | 4.30   | 4.31   | 4.31   | 4.31   | 4.30   | 4.29   | 4.29   | 4.30   | 4.33   | 4.38   | 4.41   | 4.44   | 4.46   | 4.46   | 4.47   | 6.7%  |
| LPG Bi-fuel                | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Electric                   | 0.05   | 0.14   | 0.19   | 0.24   | 0.28   | 0.31   | 0.33   | 0.33   | 0.33   | 0.33   | 0.33   | 0.33   | 0.33   | 0.33   | 0.33   | 0.33   | 0.34   | 0.34   | 0.34   | 0.34   | 0.34   | 0.34   | 9.1%  |
| Electric-Diesel Hybrid     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Fuel Cell                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Fuel Cell Gasoline         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Fuel Cell Methanol         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Fuel Cell Hydrogen         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Total Fleet Cars           | 206.14 | 198.31 | 194.24 | 188.93 | 183.56 | 182.83 | 183.73 | 184.82 | 185.08 | 184.58 | 183.59 | 183.42 | 183.29 | 183.26 | 184.00 | 185.63 | 188.24 | 190.25 | 191.18 | 190.93 | 190.33 | 190.70 | -0.4% |
| Light Trucks 1/            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Gasoline Conventional      | 208.44 | 221.17 | 223.46 | 223.05 | 222.03 | 221.44 | 224.63 | 228.52 | 232.56 | 235.57 | 237.50 | 239.13 | 240.49 | 241.93 | 244.11 | 247.44 | 251.09 | 254.19 | 256.65 | 258.09 | 258.63 | 259.06 | 1.0%  |
| Distillate                 | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Methanol                   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Flex                       | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Neat                       | 0.35   | 0.91   | 1.40   | 1.90   | 2.35   | 2.76   | 3.10   | 3.30   | 3.36   | 3.41   | 3.45   | 3.48   | 3.50   | 3.52   | 3.55   | 3.59   | 3.65   | 3.68   | 3.72   | 3.75   | 3.77   | 3.78   | 11.5% |
| Ethanol                    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Flex                       | 0.05   | 0.12   | 0.19   | 0.25   | 0.31   | 0.37   | 0.42   | 0.44   | 0.45   | 0.46   | 0.46   | 0.47   | 0.47   | 0.47   | 0.48   | 0.48   | 0.49   | 0.50   | 0.50   | 0.51   | 0.51   | 0.51   | 11.6% |
| Neat                       | 0.05   | 0.12   | 0.19   | 0.25   | 0.31   | 0.37   | 0.42   | 0.44   | 0.45   | 0.46   | 0.46   | 0.47   | 0.47   | 0.47   | 0.48   | 0.48   | 0.49   | 0.50   | 0.50   | 0.51   | 0.51   | 0.51   | 11.6% |
| CNG                        | 1.19   | 3.13   | 4.75   | 6.33   | 7.71   | 8.93   | 9.90   | 10.47  | 10.65  | 10.81  | 10.93  | 11.03  | 11.09  | 11.15  | 11.24  | 11.39  | 11.56  | 11.68  | 11.79  | 11.88  | 11.94  | 11.98  | 11.1% |
| CNG Bi-fuel                | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| LPG                        | 0.88   | 1.52   | 2.02   | 2.49   | 2.89   | 3.24   | 3.53   | 3.71   | 3.77   | 3.82   | 3.86   | 3.90   | 3.92   | 3.94   | 3.97   | 4.03   | 4.08   | 4.13   | 4.17   | 4.20   | 4.22   | 4.23   | 7.4%  |
| LPG Bi-fuel                | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Electric                   | 0.02   | 0.05   | 0.07   | 0.09   | 0.10   | 0.11   | 0.12   | 0.12   | 0.12   | 0.12   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.14   | 0.14   | 0.14   | 0.14   | 9.0%  |
| Electric-Diesel Hybrid     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Fuel Cell                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Fuel Cell Gasoline         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Fuel Cell Methanol         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Fuel Cell Hydrogen         | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A   |
| Total Fleet Light Truck    | 210.97 | 227.01 | 232.08 | 234.36 | 235.71 | 237.23 | 242.11 | 247.01 | 251.36 | 254.65 | 256.80 | 258.60 | 260.06 | 261.62 | 263.97 | 267.55 | 271.49 | 274.81 | 277.46 | 279.06 | 279.71 | 280.21 | 1.3%  |
| Total Fleet Vehicles       | 417.11 | 425.33 | 426.31 | 423.29 | 419.26 | 420.06 | 425.84 | 431.83 | 436.45 | 439.23 | 440.39 | 442.02 | 443.36 | 444.88 | 447.97 | 453.18 | 459.73 | 465.07 | 468.64 | 469.99 | 470.03 | 470.91 | 0.6%  |
| Commercial Light Trucks 2/ | 72.25  | 74.65  | 76.10  | 77.89  | 79.61  | 81.38  | 83.12  | 84.64  | 86.19  | 87.65  | 88.97  | 90.46  | 91.65  | 93.04  | 94.64  | 96.42  | 98.16  | 99.31  | 100.61 | 102.00 | 103.49 | 104.93 | 1.7%  |

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

CNG = Compressed natural gas.

LNG = Liquid petroleum gas.

ICE = Internal combustion engine.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis, March 1992; Bobit Publishing Company, Fleet Fact Book, Redondo Beach, California, various issues; Federal Highway Administration, Highway Statistics 1997, (November 1998); Decision Analysis Corporation of Virginia, NEIMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, (April 23, 1997); and Energy Information Administration (EIA), AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 55. Air Travel Energy Use (1 of 2)**

1998-

|                                     | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2020  |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Fuel Cost (1987 dollar per million) | 3.0    | 3.9    | 3.8    | 3.9    | 3.9    | 3.9    | 4.0    | 4.0    | 4.1    | 4.2    | 4.2    | 4.2     | 4.2     | 4.2     | 4.3     | 4.3     | 4.4     | 4.4     | 4.4     | 4.4     | 4.4     | 4.4     | 1.7%  |
| Macro Variables ( 1992 dollars)     |        |        |        |        |        |        |        |        |        |        |        |         |         |         |         |         |         |         |         |         |         |         |       |
| GDP                                 | 7551.9 | 7990.7 | 8190.8 | 8377.2 | 8595.9 | 8823.8 | 9056.3 | 9250.8 | 9448.9 | 9651.1 | 9840.1 | 10054.3 | 10218.1 | 10415.8 | 10648.0 | 10905.7 | 11147.2 | 11330.6 | 11533.4 | 11740.6 | 11959.4 | 12178.6 | 2.2%  |
| Disposable Income                   | 5348.5 | 5665.1 | 5800.7 | 5935.7 | 6076.0 | 6246.1 | 6405.5 | 6562.2 | 6721.9 | 6879.3 | 7038.2 | 7204.0  | 7352.7  | 7508.8  | 7684.2  | 7881.1  | 8082.6  | 8256.0  | 8427.5  | 8612.9  | 8806.7  | 9007.8  | 2.4%  |
| Real Merchandise Exports            | 742.6  | 810.3  | 871.1  | 942.1  | 1021.3 | 1114.1 | 1216.8 | 1322.0 | 1433.7 | 1551.3 | 1676.2 | 1805.5  | 1928.1  | 2051.9  | 2184.0  | 2326.3  | 2472.9  | 2618.3  | 2763.3  | 2909.8  | 3054.9  | 3200.7  | 6.9%  |
| Yield (ticket price, 1992 dollars)  | 12.0   | 12.7   | 12.6   | 12.7   | 12.7   | 12.7   | 12.8   | 12.8   | 12.9   | 12.9   | 13.0   | 13.0    | 13.0    | 13.0    | 13.0    | 13.0    | 13.1    | 13.1    | 13.1    | 13.1    | 13.1    | 13.1    | 0.4%  |
| Travel Demand(billion of miles)     |        |        |        |        |        |        |        |        |        |        |        |         |         |         |         |         |         |         |         |         |         |         |       |
| Rev. Passenger Miles Domestic       | 473.3  | 503.7  | 520.4  | 535.6  | 551.8  | 570.8  | 589.0  | 605.6  | 622.0  | 638.6  | 654.7  | 672.7   | 687.0   | 703.4   | 722.1   | 743.2   | 764.2   | 782.0   | 800.4   | 820.1   | 840.8   | 862.1   | 2.8%  |
| Personal                            | 250.0  | 266.4  | 276.2  | 284.8  | 293.4  | 304.4  | 314.5  | 324.3  | 333.9  | 343.6  | 353.2  | 363.7   | 372.4   | 382.0   | 392.6   | 404.6   | 417.2   | 428.8   | 440.2   | 452.6   | 465.7   | 479.4   | 3.0%  |
| Business                            | 223.2  | 237.2  | 244.3  | 250.7  | 258.4  | 266.4  | 274.6  | 281.3  | 288.1  | 295.1  | 301.5  | 309.0   | 314.5   | 321.4   | 329.5   | 338.6   | 347.0   | 353.3   | 360.3   | 367.4   | 375.0   | 382.7   | 2.5%  |
| Load Factor Domestic 2/             | 0.70   | 0.70   | 0.70   | 0.70   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69    | 0.69    | 0.69    | 0.69    | 0.69    | 0.69    | 0.69    | 0.69    | 0.69    | 0.69    | 0.69    | -0.1% |
| Rev. Passenger Miles Int.           | 207.1  | 230.7  | 238.6  | 251.0  | 259.2  | 274.3  | 283.5  | 298.0  | 306.7  | 321.8  | 330.4  | 346.7   | 354.8   | 370.8   | 381.5   | 401.0   | 413.0   | 430.6   | 441.0   | 460.2   | 472.0   | 484.2   | 3.9%  |
| Load Factor International 2/        | 0.74   | 0.74   | 0.74   | 0.74   | 0.74   | 0.74   | 0.74   | 0.73   | 0.73   | 0.73   | 0.73   | 0.73    | 0.73    | 0.73    | 0.73    | 0.73    | 0.73    | 0.73    | 0.73    | 0.73    | 0.73    | 0.73    | -0.1% |
| Rev. Ton Miles Freight (billion)    | 16.1   | 18.1   | 19.6   | 21.2   | 23.2   | 25.3   | 27.7   | 30.1   | 32.6   | 35.2   | 38.0   | 40.8    | 43.5    | 46.2    | 49.2    | 52.4    | 55.7    | 58.7    | 61.9    | 65.0    | 68.2    | 71.4    | 7.0%  |
| Seat Miles Demanded (billion)       | 1061.5 | 1151.2 | 1198.5 | 1250.7 | 1312.6 | 1378.4 | 1438.5 | 1507.2 | 1565.3 | 1632.4 | 1692.3 | 1765.2  | 1821.1  | 1890.1  | 1958.4  | 2042.6  | 2118.4  | 2194.9  | 2264.0  | 2345.5  | 2419.7  | 2495.2  | 4.0%  |
| Narrow Body Aircraft                | 543.7  | 577.9  | 595.6  | 615.3  | 639.3  | 664.7  | 686.7  | 712.3  | 732.4  | 756.1  | 776.0  | 801.4   | 818.5   | 841.0   | 862.7   | 890.8   | 914.6   | 938.1   | 958.0   | 982.5   | 1003.5  | 1024.5  | 2.9%  |
| Wide Body Aircraft                  | 517.8  | 573.3  | 602.9  | 635.4  | 673.3  | 713.7  | 751.8  | 794.9  | 833.0  | 876.3  | 916.3  | 963.9   | 1002.6  | 1049.1  | 1095.8  | 1151.9  | 1203.8  | 1256.8  | 1306.0  | 1362.9  | 1416.2  | 1470.8  | 4.9%  |
| Aircraft Sales                      |        |        |        |        |        |        |        |        |        |        |        |         |         |         |         |         |         |         |         |         |         |         |       |
| Narrow Body Aircraft                | 230.7  | 251.2  | 270.1  | 286.2  | 322.6  | 333.8  | 307.8  | 339.1  | 295.9  | 329.9  | 301.9  | 351.9   | 288.5   | 339.5   | 338.9   | 399.1   | 370.3   | 375.2   | 351.7   | 398.0   | 375.4   | 382.7   | 2.3%  |
| Wide Body Aircraft                  | 69.6   | 81.0   | 88.9   | 96.2   | 108.9  | 115.2  | 111.1  | 122.4  | 112.7  | 124.5  | 118.4  | 135.0   | 117.7   | 134.8   | 136.4   | 157.5   | 150.5   | 154.3   | 148.6   | 166.8   | 161.7   | 167.0   | 4.1%  |
| Aircraft Stock                      |        |        |        |        |        |        |        |        |        |        |        |         |         |         |         |         |         |         |         |         |         |         |       |
| Narrow Body Aircraft                | 4538.2 | 4837.6 | 4986.0 | 5150.8 | 5352.0 | 5563.8 | 5748.5 | 5962.7 | 6130.9 | 6329.7 | 6496.5 | 6708.5  | 6851.7  | 7040.1  | 7221.7  | 7456.7  | 7656.0  | 7853.1  | 8019.5  | 8224.9  | 8400.5  | 8576.1  | 2.9%  |
| Wide Body Aircraft                  | 1078.0 | 1196.9 | 1258.7 | 1326.4 | 1405.6 | 1490.0 | 1569.5 | 1659.4 | 1738.9 | 1829.3 | 1912.9 | 2012.2  | 2093.2  | 2190.2  | 2287.5  | 2404.6  | 2513.1  | 2623.7  | 2726.5  | 2845.3  | 2956.6  | 3070.5  | 4.9%  |
| Adv. Technology Penetration         |        |        |        |        |        |        |        |        |        |        |        |         |         |         |         |         |         |         |         |         |         |         |       |
| Ultra-high Bypass                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.02   | 0.05    | 0.09    | 0.17    | 0.30    | 0.48    | 0.68    | 0.81    | 0.90    | 0.95    | 0.97    | 0.99    | 27.2% |
| Propfan                             | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Thermodynamics                      | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Hybrid Laminar Flow                 | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Advanced Aerodynamics               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A   |
| Weight Reducing Materials           | 0.00   | 0.00   | 0.01   | 0.02   | 0.04   | 0.08   | 0.14   | 0.25   | 0.40   | 0.57   | 0.73   | 0.85    | 0.92    | 0.96    | 0.98    | 0.99    | 0.99    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 31.4% |
| Aircraft New Efficiency 3/          |        |        |        |        |        |        |        |        |        |        |        |         |         |         |         |         |         |         |         |         |         |         |       |
| Narrow Body Aircraft                | 50.4   | 51.2   | 51.6   | 52.0   | 52.4   | 52.8   | 53.3   | 53.7   | 54.1   | 54.5   | 54.9   | 55.3    | 55.8    | 56.1    | 56.6    | 57.0    | 57.4    | 57.8    | 58.3    | 58.7    | 59.1    | 59.6    | 0.8%  |
| Wide Body Aircraft                  | 60.2   | 61.0   | 61.3   | 61.7   | 62.1   | 62.5   | 62.9   | 63.3   | 63.7   | 64.1   | 64.4   | 64.8    | 65.2    | 65.5    | 65.9    | 66.3    | 66.6    | 67.2    | 67.6    | 67.9    | 68.1    | 68.5    | 0.6%  |
| Average Aircraft                    | 52.4   | 53.3   | 53.7   | 54.1   | 54.6   | 55.0   | 55.5   | 55.9   | 56.4   | 56.8   | 57.3   | 57.7    | 58.2    | 58.5    | 59.0    | 59.3    | 59.8    | 60.3    | 60.8    | 61.1    | 61.6    | 62.0    | 0.8%  |

**Table 55. Air Travel Energy Use (2 of 2)**

|                                 | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |       |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|
| Aircraft Stock Efficiency 3/    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Narrow Body Aircraft            | 47.3   | 48.0   | 48.4   | 48.8   | 49.2   | 49.6   | 49.9   | 50.3   | 50.7   | 51.1   | 51.5   | 51.9   | 52.2   | 52.6   | 53.0   | 53.4   | 53.8   | 54.2   | 54.6   | 55.0   | 55.4   | 55.8   | 56.2      | 0.8%  |
| Wide Body Aircraft              | 56.5   | 57.2   | 57.6   | 57.9   | 58.3   | 58.7   | 59.0   | 59.4   | 59.8   | 60.1   | 60.5   | 60.8   | 61.1   | 61.5   | 61.8   | 62.2   | 62.5   | 62.9   | 63.2   | 63.6   | 63.9   | 64.2   | 64.5      | 0.6%  |
| Average Aircraft                | 51.4   | 52.2   | 52.6   | 53.0   | 53.5   | 53.9   | 54.3   | 54.8   | 55.2   | 55.6   | 56.0   | 56.4   | 56.8   | 57.2   | 57.6   | 58.0   | 58.4   | 58.9   | 59.3   | 59.7   | 60.1   | 60.5   | 60.9      | 0.7%  |
| Fuel Consumption (trillion Btu) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Commercial                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Jet Fuel                        | 2902.0 | 3097.1 | 3199.1 | 3311.7 | 3447.4 | 3590.6 | 3718.3 | 3864.9 | 3984.5 | 4123.9 | 4244.5 | 4394.2 | 4502.3 | 4639.4 | 4773.2 | 4941.7 | 5088.9 | 5235.6 | 5363.8 | 5518.0 | 5654.6 | 5792.4 | 3.2%      |       |
| Aviation Gasoline               | 42.8   | 42.6   | 42.5   | 42.4   | 42.3   | 42.3   | 42.3   | 42.2   | 42.2   | 42.2   | 42.2   | 42.1   | 42.1   | 42.1   | 42.1   | 42.1   | 42.1   | 42.1   | 42.1   | 42.1   | 42.1   | 42.1   | 42.1      | -0.1% |
| Military                        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Jet Fuel                        | 455.0  | 460.7  | 456.9  | 454.7  | 451.8  | 450.4  | 453.3  | 458.0  | 462.2  | 466.6  | 470.5  | 472.7  | 473.3  | 474.5  | 475.8  | 477.2  | 478.5  | 479.9  | 481.3  | 482.7  | 484.1  | 485.5  | 0.3%      |       |

1/ Fraction of seats filled.

2/ 1992 cents per passenger-mile.

3/ Seat miles per gallon.

RPM = Revenue passenger miles.

GDP = Gross domestic product.

Btu = British thermal unit.

N/A = Not applicable.

Rev. = Revenue.

Int. = International.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Model Maintenance Re-Estimation of the Air Travel Demand Model, Subtask 22-1(a), (September 30, 1997); Federal Aviation Administration (FAA), FAA Aviation Forecasts, Fiscal Years 1997-2008, FAA-APO 97-1, and previous editions; United States Department of Transportation (DOT), Research and Special Programs Administration (RSPA), Fuel Cost and Consumption Tables, annual summaries, 1979-1990; DOT, RSPA, Air Carrier Financial Statistics Quarterly, December 1990/1989, and prior issues; DOT, RSPA, Air Carrier Traffic Statistics Monthly, December 1997/1996, and prior issues; Greene, D.L., "Energy Efficiency Improvement Potential of Commercial Aircraft to 2010," ORNL-6622, 6/1990; Rathi, A. B., Peterson, and D. Greene, Air Transport Energy Use Model, Oak Ridge National Laboratory, April 1991, Draft; Energy Information Administration (EIA), State Energy Data Report 1996, DOE/EIA-0214(96) (Washington, DC, February 1999); Department of Defense, Defense Energy Support Center, Fact Book: Fiscal Year 1998; and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 56. Freight Transportation Energy Use (1 of 3)**

1998-

|  | 1998    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2020  |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Existing Trucks by Size Class            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Vehicle Miles Traveled (billion miles)   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Medium                                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Diesel                                   | 32.12   | 33.77   | 34.49   | 35.45   | 36.46   | 37.10   | 37.74   | 38.33   | 38.98   | 39.63   | 40.12   | 40.70   | 41.12   | 41.66   | 42.34   | 43.06   | 43.76   | 44.18   | 44.74   | 45.34   | 45.94   | 46.56   | 1.7%  |
| Gasoline                                 | 18.26   | 15.74   | 14.77   | 13.82   | 13.01   | 12.28   | 11.63   | 11.04   | 10.50   | 10.04   | 9.60    | 9.22    | 8.84    | 8.53    | 8.25    | 8.00    | 7.78    | 7.56    | 7.37    | 7.20    | 7.06    | 6.92    | -4.3% |
| Liquid Petroleum Gas                     | 1.06    | 0.99    | 0.98    | 0.96    | 0.95    | 0.94    | 0.94    | 0.95    | 0.96    | 0.98    | 0.99    | 1.01    | 1.02    | 1.04    | 1.06    | 1.08    | 1.10    | 1.11    | 1.13    | 1.14    | 1.16    | 1.17    | 0.4%  |
| Compressed Natural Gas                   | 0.11    | 0.12    | 0.13    | 0.15    | 0.20    | 0.27    | 0.35    | 0.44    | 0.56    | 0.69    | 0.83    | 0.97    | 1.11    | 1.26    | 1.41    | 1.55    | 1.67    | 1.77    | 1.87    | 1.96    | 2.04    | 2.11    | 14.4% |
| Medium Subtotal                          | 51.55   | 50.61   | 50.37   | 50.38   | 50.63   | 50.58   | 50.66   | 50.77   | 51.01   | 51.33   | 51.54   | 51.90   | 52.10   | 52.48   | 53.06   | 53.69   | 54.32   | 54.62   | 55.11   | 55.64   | 56.19   | 56.77   | 0.4%  |
| Heavy                                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Diesel                                   | 130.70  | 141.03  | 145.07  | 149.76  | 154.44  | 158.59  | 162.44  | 165.15  | 167.92  | 170.36  | 172.11  | 174.64  | 176.29  | 178.54  | 181.36  | 184.35  | 187.11  | 188.65  | 190.76  | 192.94  | 195.23  | 197.55  | 1.9%  |
| Gasoline                                 | 1.98    | 1.68    | 1.56    | 1.46    | 1.36    | 1.28    | 1.21    | 1.14    | 1.08    | 1.03    | 0.97    | 0.93    | 0.89    | 0.85    | 0.82    | 0.79    | 0.77    | 0.74    | 0.72    | 0.71    | 0.69    | 0.68    | -4.8% |
| Liquid Petroleum Gas                     | 0.13    | 0.13    | 0.13    | 0.13    | 0.14    | 0.15    | 0.16    | 0.17    | 0.18    | 0.19    | 0.20    | 0.20    | 0.21    | 0.22    | 0.23    | 0.24    | 0.24    | 0.25    | 0.25    | 0.26    | 0.26    | 0.26    | 3.2%  |
| Compressed Natural Gas                   | 0.03    | 0.04    | 0.05    | 0.06    | 0.09    | 0.12    | 0.15    | 0.20    | 0.26    | 0.31    | 0.38    | 0.44    | 0.50    | 0.57    | 0.63    | 0.69    | 0.74    | 0.78    | 0.82    | 0.86    | 0.89    | 0.92    | 16.4% |
| Heavy Subtotal                           | 132.84  | 142.87  | 146.81  | 151.41  | 156.03  | 160.13  | 163.96  | 166.66  | 169.43  | 171.89  | 173.66  | 176.22  | 177.89  | 180.17  | 183.04  | 186.07  | 188.86  | 190.42  | 192.56  | 194.77  | 197.07  | 199.41  | 1.9%  |
| Total Vehicle Miles Traveled             | 184.39  | 193.48  | 197.18  | 201.80  | 206.66  | 210.72  | 214.62  | 217.43  | 220.45  | 223.21  | 225.20  | 228.12  | 229.99  | 232.66  | 236.09  | 239.76  | 243.18  | 245.04  | 247.67  | 250.40  | 253.27  | 256.18  | 1.5%  |
| Consumption (trillion Btu)               |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Medium                                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Diesel                                   | 531.45  | 545.08  | 551.36  | 561.42  | 573.06  | 579.50  | 586.20  | 593.04  | 600.85  | 608.98  | 615.21  | 622.74  | 628.03  | 635.22  | 644.59  | 654.57  | 664.41  | 670.19  | 678.28  | 686.74  | 695.46  | 704.40  | 1.3%  |
| Gasoline                                 | 305.69  | 262.75  | 246.23  | 230.19  | 216.18  | 203.95  | 192.93  | 183.09  | 173.89  | 165.81  | 158.34  | 151.53  | 144.92  | 139.22  | 134.01  | 129.36  | 125.25  | 121.07  | 117.54  | 114.28  | 111.38  | 108.74  | -4.6% |
| Liquid Petroleum Gas                     | 17.65   | 16.58   | 16.36   | 16.00   | 15.89   | 15.66   | 15.70   | 15.85   | 15.99   | 16.18   | 16.41   | 16.67   | 16.86   | 17.11   | 17.41   | 17.72   | 18.02   | 18.18   | 18.38   | 18.57   | 18.76   | 18.94   | 0.3%  |
| Compressed Natural Gas                   | 1.76    | 1.88    | 2.09    | 2.52    | 3.31    | 4.34    | 5.66    | 7.24    | 9.17    | 11.24   | 13.47   | 15.87   | 18.14   | 20.47   | 22.90   | 25.17   | 27.22   | 28.81   | 30.37   | 31.83   | 33.16   | 34.37   | 14.5% |
| Medium Subtotal                          | 856.56  | 826.29  | 816.04  | 810.13  | 808.44  | 803.46  | 800.49  | 799.23  | 799.90  | 802.21  | 803.42  | 806.81  | 807.96  | 812.02  | 818.92  | 826.82  | 834.90  | 838.25  | 844.57  | 851.42  | 858.76  | 866.45  | 0.1%  |
| Heavy                                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Diesel                                   | 3235.47 | 3415.80 | 3483.97 | 3567.00 | 3649.96 | 3724.73 | 3793.53 | 3835.88 | 3877.07 | 3909.69 | 3923.09 | 3950.44 | 3957.14 | 3976.46 | 4006.40 | 4040.59 | 4070.68 | 4075.89 | 4090.42 | 4102.07 | 4113.40 | 4124.55 | 1.1%  |
| Gasoline                                 | 44.23   | 37.71   | 35.31   | 33.06   | 30.97   | 29.19   | 27.61   | 26.13   | 24.74   | 23.44   | 22.23   | 21.16   | 20.12   | 19.23   | 18.42   | 17.70   | 17.06   | 16.43   | 15.90   | 15.40   | 14.97   | 14.58   | -4.9% |
| Liquid Petroleum Gas                     | 2.95    | 2.76    | 2.74    | 2.78    | 2.88    | 2.99    | 3.09    | 3.23    | 3.37    | 3.51    | 3.65    | 3.78    | 3.88    | 3.99    | 4.11    | 4.22    | 4.31    | 4.37    | 4.43    | 4.48    | 4.52    | 4.56    | 2.0%  |
| Compressed Natural Gas                   | 0.69    | 0.78    | 0.93    | 1.18    | 1.58    | 2.12    | 2.79    | 3.59    | 4.53    | 5.55    | 6.61    | 7.71    | 8.74    | 9.78    | 10.84   | 11.83   | 12.71   | 13.41   | 14.08   | 14.69   | 15.24   | 15.75   | 15.3% |
| Heavy Subtotal                           | 3283.34 | 3457.05 | 3522.95 | 3604.02 | 3685.40 | 3759.03 | 3827.02 | 3868.82 | 3909.71 | 3942.19 | 3955.58 | 3983.09 | 3989.90 | 4009.47 | 4039.77 | 4074.33 | 4104.77 | 4110.10 | 4124.83 | 4136.64 | 4148.12 | 4159.44 | 1.1%  |
| Medium and Heavy Total                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Diesel                                   | 3766.92 | 3960.88 | 4035.33 | 4128.42 | 4223.02 | 4304.24 | 4379.73 | 4428.92 | 4477.92 | 4518.67 | 4538.29 | 4573.18 | 4585.18 | 4611.68 | 4651.00 | 4695.16 | 4735.10 | 4746.08 | 4768.70 | 4788.81 | 4808.86 | 4828.95 | 1.1%  |
| Gasoline                                 | 349.92  | 300.46  | 281.55  | 263.25  | 247.16  | 233.14  | 220.54  | 209.23  | 198.63  | 189.25  | 180.56  | 172.69  | 165.05  | 158.45  | 152.43  | 147.05  | 142.30  | 137.50  | 133.44  | 129.68  | 126.35  | 123.32  | -4.6% |
| Liquid Petroleum Gas                     | 2.45    | 2.66    | 3.02    | 3.71    | 4.89    | 6.46    | 8.45    | 10.83   | 13.70   | 16.78   | 20.08   | 23.58   | 26.88   | 30.25   | 33.74   | 37.00   | 39.93   | 42.22   | 44.45   | 46.52   | 48.40   | 50.12   | 14.7% |
| Compressed Natural Gas                   | 20.61   | 19.34   | 19.10   | 18.79   | 18.77   | 18.66   | 18.80   | 19.08   | 19.36   | 19.70   | 20.05   | 20.45   | 20.75   | 21.10   | 21.52   | 21.94   | 22.33   | 22.55   | 22.81   | 23.05   | 23.28   | 23.49   | 0.6%  |
| Total                                    | 4139.90 | 4283.34 | 4338.99 | 4414.15 | 4493.83 | 4562.48 | 4627.51 | 4668.05 | 4709.61 | 4744.40 | 4758.98 | 4789.90 | 4797.85 | 4821.49 | 4858.68 | 4901.15 | 4939.66 | 4948.34 | 4969.39 | 4988.06 | 5006.88 | 5025.89 | 0.9%  |
| Fuel Efficiency<br>(Gasoline Equivalent) |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Medium                                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Diesel                                   | 7.61    | 7.78    | 7.87    | 7.94    | 7.98    | 8.03    | 8.10    | 8.13    | 8.16    | 8.19    | 8.19    | 8.22    | 8.24    | 8.25    | 8.26    | 8.28    | 8.29    | 8.30    | 8.31    | 8.31    | 8.32    | 8.32    | 0.4%  |
| Gasoline                                 | 7.52    | 7.54    | 7.56    | 7.53    | 7.59    | 7.55    | 7.58    | 7.56    | 7.59    | 7.62    | 7.61    | 7.65    | 7.67    | 7.69    | 7.72    | 7.76    | 7.80    | 7.84    | 7.87    | 7.91    | 7.95    | 7.99    | 0.3%  |
| Liquid Petroleum Gas                     | 7.67    | 7.55    | 7.60    | 7.63    | 7.60    | 7.58    | 7.58    | 7.58    | 7.60    | 7.60    | 7.61    | 7.63    | 7.64    | 7.66    | 7.68    | 7.70    | 7.71    | 7.72    | 7.73    | 7.74    | 7.75    | 7.76    | 0.1%  |
| Compressed Natural Gas                   | 7.84    | 7.73    | 7.80    | 7.78    | 7.73    | 7.73    | 7.73    | 7.74    | 7.74    | 7.75    | 7.75    | 7.76    | 7.76    | 7.76    | 7.76    | 7.76    | 7.76    | 7.76    | 7.76    | 7.76    | 7.76    | 7.76    | -0.1% |
| Medium Average                           | 7.58    | 7.70    | 7.77    | 7.81    | 7.86    | 7.90    | 7.96    | 7.99    | 8.02    | 8.05    | 8.06    | 8.09    | 8.11    | 8.13    | 8.15    | 8.17    | 8.19    | 8.20    | 8.21    | 8.23    | 8.24    | 8.25    | 0.4%  |
| Heavy                                    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |       |
| Diesel                                   | 5.10    | 5.20    | 5.24    | 5.28    | 5.32    | 5.36    | 5.39    | 5.42    | 5.45    | 5.48    | 5.51    | 5.56    | 5.60    | 5.64    | 5.69    | 5.74    | 5.78    | 5.82    | 5.86    | 5.91    | 5.97    | 6.02    | 0.8%  |
| Gasoline                                 | 5.68    | 5.60    | 5.57    | 5.56    | 5.56    | 5.54    | 5.53    | 5.51    | 5.51    | 5.52    | 5.51    | 5.53    | 5.55    | 5.57    | 5.60    | 5.63    | 5.66    | 5.69    | 5.72    | 5.76    | 5.79    | 5.83    | 0.1%  |
| Liquid Petroleum Gas                     | 5.58    | 5.72    | 5.91    | 6.00    | 6.12    | 6.24    | 6.37    | 6.47    | 6.59    | 6.64    | 6.71    | 6.79    | 6.86    | 6.92    | 6.98    | 7.03    | 7.08    | 7.12    | 7.15    | 7.17    | 7.20    | 7.21    | 1.2%  |
| Compressed Natural Gas                   | 6.04    | 6.30    | 6.46    | 6.64    | 6.80    | 6.91    | 6.99    | 7.05    | 7.11    | 7.15    | 7.19    | 7.23    | 7.27    | 7.30    | 7.32    | 7.34    | 7.36    | 7.37    | 7.38    | 7.38    | 7.38    | 7.38    | 0.9%  |
| Heavy Average                            | 5.10    | 5.20    | 5.24    | 5.29    | 5.33    | 5.36    | 5.40    | 5.42    | 5.45    | 5.48    | 5.51    | 5.56    | 5.61    | 5.65    | 5.69    | 5.74    | 5.79    | 5.83    | 5.87    | 5.92    | 5.97    | 6.02    | 0.8%  |
| Average                                  | 5.62    | 5.69    | 5.72    | 5.75    | 5.78    | 5.81    | 5.84    | 5.86    | 5.89    | 5.91    | 5.94    | 5.99    | 6.03    | 6.07    | 6.11    | 6.15    | 6.19    | 6.23    | 6.27    | 6.31    | 6.36    | 6.41    | 0.6%  |



**Table 56. Freight Transportation Energy Use (3 of 3)**

|                                     | 1998    | 2000    | 2001    | 2002    | 2003    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 1998-2020 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| <b>Domestic Shipping</b>            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |
| Ton Miles Shipping (bill. ton mile) | 692.23  | 705.78  | 706.75  | 712.63  | 722.73  | 730.95  | 740.97  | 749.56  | 758.71  | 766.77  | 771.89  | 780.98  | 786.89  | 794.64  | 804.55  | 815.79  | 827.23  | 832.81  | 840.66  | 847.63  | 854.65  | 861.25  | 1.0%      |
| Fuel Eff. (ton miles per thou Btu)  | 2.44    | 2.50    | 2.53    | 2.56    | 2.59    | 2.62    | 2.65    | 2.69    | 2.72    | 2.75    | 2.79    | 2.82    | 2.85    | 2.89    | 2.92    | 2.96    | 2.99    | 3.03    | 3.07    | 3.10    | 3.14    | 3.18    | 1.2%      |
| Fuel Consumption (trillion Btu)     |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |
| Diesel (distillate)                 | 199.98  | 196.98  | 194.89  | 194.15  | 194.54  | 194.39  | 194.69  | 194.58  | 194.60  | 194.30  | 193.25  | 193.18  | 192.31  | 191.87  | 191.93  | 192.28  | 192.64  | 191.61  | 191.09  | 190.37  | 189.64  | 188.81  | -0.3%     |
| Residual Oil                        | 83.85   | 85.55   | 84.64   | 84.32   | 84.49   | 84.43   | 84.56   | 84.51   | 84.52   | 84.39   | 83.93   | 83.90   | 83.52   | 83.33   | 83.36   | 83.51   | 83.67   | 83.22   | 83.00   | 82.68   | 82.36   | 82.00   | -0.1%     |
| Motor Gasoline                      | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | N/A       |
| <b>International Shipping</b>       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |
| Gross Trade (billion 1987 \$)       | 1758.86 | 1985.28 | 2108.35 | 2243.42 | 2403.29 | 2592.12 | 2804.04 | 3014.62 | 3233.24 | 3468.46 | 3716.93 | 3984.87 | 4237.55 | 4488.13 | 4767.23 | 5075.86 | 5400.03 | 5697.65 | 6002.43 | 6327.69 | 6669.89 | 7031.37 | 6.5%      |
| Exports (billion 1987 dollars)      | 742.62  | 810.35  | 871.12  | 942.08  | 1021.31 | 1114.06 | 1216.84 | 1322.05 | 1433.67 | 1551.32 | 1676.17 | 1805.55 | 1928.11 | 2051.86 | 2184.03 | 2326.30 | 2472.85 | 2618.32 | 2763.26 | 2909.83 | 3054.90 | 3200.68 | 6.9%      |
| Imports (billion 1987 dollars)      | 1016.24 | 1174.93 | 1237.24 | 1301.34 | 1381.99 | 1478.06 | 1587.20 | 1692.57 | 1799.57 | 1917.15 | 2040.76 | 2179.33 | 2309.44 | 2436.27 | 2583.20 | 2749.56 | 2927.18 | 3079.33 | 3239.17 | 3417.86 | 3614.99 | 3830.69 | 6.2%      |
| Fuel Consumption (trillion Btu)     |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |           |
| Diesel (distillate)                 | 68.32   | 72.87   | 75.11   | 77.47   | 80.16   | 83.19   | 86.42   | 89.48   | 92.55   | 95.74   | 98.99   | 102.37  | 105.43  | 108.35  | 111.49  | 114.84  | 118.27  | 121.29  | 124.31  | 127.48  | 130.76  | 134.16  | 3.1%      |
| Residual Oil                        | 558.38  | 595.63  | 613.95  | 633.23  | 655.26  | 680.05  | 706.41  | 731.46  | 756.55  | 782.59  | 809.18  | 836.85  | 861.80  | 885.66  | 911.33  | 938.78  | 966.78  | 991.46  | 1016.15 | 1042.05 | 1068.85 | 1096.65 | 3.1%      |

VM1 = Vehicle Miles Traveled  
 MPG = Miles per gallon.  
 Btu = British thermal unit.  
 N/A = Not applicable.  
 Bill. = Billion.  
 Thou. = Thousand.  
 Eff. = Efficiency.  
 \$ = Dollars.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, Transportation Energy Data Book: 17 and 18 (September 1998); United States Department of Transportation, 1989 Carload Waybill Statistics Traffic and Revenue by Commodity Classes, September 1991 and prior issues; Reebie Associates, TRANSEARCH Database, (Greenwich, Connecticut, 1989); Army Corps of Engineers, Waterborne Commerce of the United States, (New Orleans), 1991 and prior issues; U.S. Department of Commerce, Bureau of the Census, "Truck Inventory and U.S. Survey," IC92-1-52, (Washington, DC, May 1995); Federal Highway Administration, Highway Statistics 1997 (Washington, DC, November 1998); and Energy Information Administration (EIA), AEO2000 National Energy Modeling System run AEO2K.D100198A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 57. New Light-Duty Vehicle Fuel Economy (1 of 4)  
(Miles per Gallon)**

1998-

|                               | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |      |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Gasoline                      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Minicompact Cars              | 26.10 | 26.56 | 26.71 | 27.00 | 27.75 | 27.75 | 28.02 | 28.36 | 28.69 | 28.96 | 29.26 | 29.37 | 29.47 | 29.55 | 29.61 | 29.64 | 29.69 | 29.72 | 29.74 | 29.77 | 29.81 | 29.81 | 0.6%  |      |
| Subcompact Cars               | 31.81 | 32.38 | 32.48 | 32.62 | 33.26 | 33.25 | 33.30 | 33.46 | 33.62 | 33.79 | 33.99 | 34.07 | 34.21 | 34.24 | 34.19 | 34.08 | 33.99 | 33.93 | 33.88 | 33.83 | 33.76 | 33.66 | 0.3%  |      |
| Compact Cars                  | 30.66 | 31.35 | 31.41 | 31.61 | 32.50 | 32.46 | 32.53 | 32.72 | 32.95 | 33.19 | 33.36 | 33.54 | 33.78 | 33.81 | 33.78 | 33.69 | 33.62 | 33.59 | 33.56 | 33.52 | 33.45 | 33.39 | 0.4%  |      |
| Midsize Cars                  | 27.13 | 27.67 | 27.71 | 27.92 | 28.54 | 28.52 | 28.63 | 28.85 | 29.11 | 29.33 | 29.53 | 29.74 | 30.00 | 30.03 | 30.05 | 30.03 | 29.99 | 29.99 | 29.99 | 29.99 | 29.99 | 29.98 | 29.97 | 0.5% |
| Large Cars                    | 24.64 | 24.97 | 25.01 | 25.30 | 26.03 | 26.03 | 26.17 | 26.40 | 26.66 | 26.93 | 27.19 | 27.51 | 27.88 | 27.98 | 28.06 | 28.11 | 28.11 | 28.14 | 28.20 | 28.23 | 28.26 | 28.29 | 0.6%  |      |
| 2-Seater Cars                 | 24.83 | 25.25 | 25.35 | 25.56 | 26.18 | 26.17 | 26.32 | 26.56 | 26.80 | 27.01 | 27.22 | 27.30 | 27.41 | 27.45 | 27.47 | 27.45 | 27.44 | 27.43 | 27.43 | 27.43 | 27.42 | 27.39 | 0.4%  |      |
| Small Pickup                  | 23.77 | 24.16 | 24.11 | 24.16 | 24.32 | 24.22 | 24.14 | 24.17 | 24.23 | 24.12 | 24.13 | 24.22 | 24.34 | 24.45 | 24.54 | 24.61 | 24.68 | 24.76 | 24.84 | 24.95 | 25.06 | 24.99 | 0.2%  |      |
| Large Pickup                  | 18.52 | 18.49 | 18.45 | 18.48 | 18.60 | 18.51 | 18.57 | 18.74 | 18.86 | 18.84 | 18.95 | 19.13 | 19.31 | 19.48 | 19.62 | 19.75 | 19.88 | 20.03 | 20.18 | 20.34 | 20.51 | 20.47 | 0.5%  |      |
| Small Van                     | 24.50 | 25.03 | 25.06 | 25.17 | 25.48 | 25.45 | 25.49 | 25.63 | 25.76 | 25.61 | 25.61 | 25.71 | 25.85 | 25.98 | 26.09 | 26.18 | 26.26 | 26.39 | 26.53 | 26.70 | 26.89 | 26.84 | 0.4%  |      |
| Large Van                     | 18.40 | 18.80 | 18.93 | 19.19 | 19.51 | 19.49 | 19.66 | 19.94 | 20.20 | 20.22 | 20.37 | 20.60 | 20.82 | 21.03 | 21.20 | 21.35 | 21.50 | 21.67 | 21.84 | 22.04 | 22.26 | 22.26 | 0.9%  |      |
| Small Utility                 | 21.07 | 21.61 | 21.61 | 21.76 | 22.06 | 22.01 | 22.03 | 22.18 | 22.38 | 22.34 | 22.41 | 22.56 | 22.71 | 22.85 | 22.99 | 23.10 | 23.20 | 23.28 | 23.38 | 23.47 | 23.59 | 23.57 | 0.5%  |      |
| Large Utility                 | 17.16 | 14.59 | 14.64 | 14.79 | 14.99 | 15.00 | 15.13 | 15.34 | 15.53 | 15.55 | 15.69 | 15.89 | 16.07 | 16.20 | 16.31 | 16.41 | 16.51 | 16.62 | 16.74 | 16.85 | 17.00 | 16.98 | 0.0%  |      |
| Turbo Direct Injection Diesel |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Minicompact Cars              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |      |
| Subcompact Cars               | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |      |
| Compact Cars                  | 39.84 | 40.51 | 40.55 | 40.67 | 41.20 | 41.11 | 41.17 | 41.34 | 41.51 | 41.72 | 41.93 | 42.05 | 42.25 | 42.37 | 42.27 | 42.10 | 41.94 | 41.84 | 41.76 | 41.66 | 41.55 | 41.44 | 0.2%  |      |
| Midsize Cars                  | 37.62 | 38.28 | 38.36 | 38.56 | 39.01 | 38.92 | 39.06 | 39.30 | 39.55 | 39.78 | 40.08 | 40.25 | 40.48 | 40.61 | 40.59 | 40.51 | 40.42 | 40.37 | 40.33 | 40.28 | 40.22 | 40.16 | 0.3%  |      |
| Large Cars                    | 35.38 | 35.77 | 35.82 | 36.05 | 36.85 | 36.83 | 37.00 | 37.26 | 37.53 | 37.82 | 38.11 | 38.48 | 38.93 | 39.18 | 39.24 | 39.27 | 39.28 | 39.33 | 39.41 | 39.46 | 39.49 | 39.50 | 0.5%  |      |
| 2-Seater Cars                 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |      |
| Small Pickup                  | 32.55 | 33.20 | 33.15 | 33.23 | 33.48 | 33.36 | 33.28 | 33.34 | 33.49 | 33.35 | 33.35 | 33.40 | 33.48 | 33.56 | 33.64 | 33.68 | 33.72 | 33.75 | 33.83 | 33.86 | 33.92 | 33.83 | 0.2%  |      |
| Large Pickup                  | 24.03 | 24.20 | 24.16 | 24.18 | 24.28 | 24.16 | 24.26 | 24.47 | 24.62 | 24.55 | 24.62 | 24.79 | 24.97 | 25.16 | 25.34 | 25.50 | 25.65 | 25.81 | 25.96 | 26.15 | 26.36 | 26.32 | 0.4%  |      |
| Small Van                     | 29.42 | 30.04 | 30.02 | 30.13 | 30.47 | 30.38 | 30.37 | 30.52 | 30.73 | 30.64 | 30.67 | 30.76 | 30.89 | 31.02 | 31.13 | 31.22 | 31.28 | 31.34 | 31.42 | 31.48 | 31.56 | 31.50 | 0.3%  |      |
| Large Van                     | 23.49 | 23.97 | 24.12 | 24.43 | 24.80 | 24.79 | 25.01 | 25.35 | 25.69 | 25.66 | 25.77 | 25.96 | 26.15 | 26.37 | 26.57 | 26.76 | 26.93 | 27.12 | 27.31 | 27.52 | 27.78 | 27.77 | 0.8%  |      |
| Small Utility                 | 27.32 | 27.96 | 27.96 | 28.13 | 28.48 | 28.39 | 28.41 | 28.58 | 28.81 | 28.76 | 28.81 | 28.92 | 29.06 | 29.20 | 29.33 | 29.43 | 29.52 | 29.60 | 29.69 | 29.78 | 29.89 | 29.83 | 0.4%  |      |
| Large Utility                 | 21.22 | 21.64 | 21.70 | 21.92 | 22.19 | 22.18 | 22.38 | 22.68 | 22.95 | 22.91 | 23.00 | 23.21 | 23.41 | 23.58 | 23.74 | 23.88 | 24.00 | 24.12 | 24.26 | 24.43 | 24.63 | 24.60 | 0.7%  |      |
| Methanol                      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Minicompact Cars              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |      |
| Subcompact Cars               | 38.37 | 38.98 | 39.04 | 39.15 | 39.74 | 39.68 | 39.71 | 39.85 | 40.00 | 40.17 | 40.41 | 40.52 | 40.69 | 40.76 | 40.68 | 40.53 | 40.39 | 40.31 | 40.24 | 40.16 | 40.06 | 39.94 | 0.2%  |      |
| Compact Cars                  | 31.84 | 32.46 | 32.48 | 32.63 | 33.42 | 33.34 | 33.38 | 33.55 | 33.75 | 33.97 | 34.10 | 34.22 | 34.40 | 34.43 | 34.37 | 34.26 | 34.17 | 34.11 | 34.08 | 34.02 | 33.93 | 33.85 | 0.3%  |      |
| Midsize Cars                  | 30.11 | 30.71 | 30.75 | 30.95 | 31.56 | 31.52 | 31.63 | 31.87 | 32.13 | 32.37 | 32.56 | 32.72 | 32.92 | 32.95 | 32.94 | 32.90 | 32.86 | 32.84 | 32.83 | 32.80 | 32.77 | 32.74 | 0.4%  |      |
| Large Cars                    | 28.32 | 28.67 | 28.70 | 28.95 | 29.77 | 29.91 | 29.91 | 30.15 | 30.42 | 30.71 | 30.99 | 31.33 | 31.74 | 31.84 | 31.92 | 31.98 | 32.01 | 32.03 | 32.08 | 32.11 | 32.13 | 32.17 | 0.6%  |      |
| 2-Seater Cars                 | 30.94 | 31.43 | 31.68 | 32.13 | 33.05 | 33.15 | 33.53 | 33.99 | 34.41 | 34.80 | 35.15 | 35.47 | 35.79 | 35.91 | 36.02 | 36.11 | 36.18 | 36.27 | 36.35 | 36.41 | 36.48 | 36.53 | 0.8%  |      |
| Small Pickup                  | 26.05 | 26.58 | 26.53 | 26.60 | 26.84 | 26.74 | 26.66 | 26.71 | 26.83 | 26.76 | 26.79 | 26.87 | 26.98 | 27.09 | 27.19 | 27.26 | 27.32 | 27.38 | 27.45 | 27.50 | 27.56 | 27.49 | 0.2%  |      |
| Large Pickup                  | 19.25 | 19.39 | 19.35 | 19.38 | 19.49 | 19.39 | 19.47 | 19.64 | 19.76 | 19.73 | 19.83 | 20.01 | 20.19 | 20.37 | 20.52 | 20.65 | 20.78 | 20.92 | 21.07 | 21.24 | 21.42 | 21.38 | 0.5%  |      |
| Small Van                     | 23.56 | 24.07 | 24.04 | 24.14 | 24.45 | 24.37 | 24.36 | 24.48 | 24.66 | 24.62 | 24.68 | 24.80 | 24.94 | 25.07 | 25.20 | 25.30 | 25.38 | 25.47 | 25.55 | 25.61 | 25.67 | 25.62 | 0.4%  |      |
| Large Van                     | 18.81 | 19.21 | 19.34 | 19.60 | 19.92 | 19.90 | 20.07 | 20.36 | 20.63 | 20.63 | 20.76 | 20.96 | 21.18 | 21.38 | 21.56 | 21.71 | 21.86 | 22.01 | 22.18 | 22.38 | 22.62 | 22.61 | 0.8%  |      |
| Small Utility                 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |      |
| Large Utility                 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |      |
| Methanol Flex                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
| Minicompact Cars              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A   |      |
| Subcompact Cars               | 36.22 | 36.81 | 36.88 | 37.00 | 37.66 | 37.59 | 37.61 | 37.76 | 37.91 | 38.09 | 38.31 | 38.42 | 38.60 | 38.65 | 38.57 | 38.43 | 38.30 | 38.23 | 38.18 | 38.11 | 38.01 | 37.89 | 0.2%  |      |
| Compact Cars                  | 30.07 | 30.69 | 30.70 | 30.85 | 31.67 | 31.60 | 31.64 | 31.81 | 32.01 | 32.22 | 32.35 | 32.47 | 32.64 | 32.66 | 32.61 | 32.52 | 32.43 | 32.39 | 32.35 | 32.28 | 32.21 | 32.12 | 0.3%  |      |
| Midsize Cars                  | 28.44 | 29.03 | 29.06 | 29.26 | 29.89 | 29.84 | 29.96 | 30.18 | 30.44 | 30.67 | 30.85 | 31.01 | 31.21 | 31.24 | 31.24 | 31.20 | 31.17 | 31.15 | 31.14 | 31.13 | 31.11 | 31.08 | 0.4%  |      |
| Large Cars                    | 26.76 | 27.09 | 27.12 | 27.41 | 28.18 | 28.19 | 28.31 | 28.55 | 28.81 | 29.09 | 29.37 | 29.70 | 30.11 | 30.20 | 30.29 | 30.35 | 30.35 | 30.38 | 30.43 | 30.47 | 30.50 | 30.52 | 0.6%  |      |
| 2-Seater Cars                 | 29.22 | 29.70 | 29.95 | 30.37 | 31.31 | 31.40 | 31.76 | 32.21 | 32.61 | 32.98 | 33.32 | 33.62 | 33.93 | 34.05 | 34.16 | 34.25 | 34.33 | 34.41 | 34.48 | 34.54 | 34.61 | 34.66 | 0.8%  |      |
| Small Pickup                  | 24.60 | 25.11 | 25.05 | 25.13 | 25.35 | 25.25 | 25.18 | 25.23 | 25.35 | 25.28 | 25.33 | 25.42 | 25.54 | 25.64 | 25.75 | 25.82 | 25.89 | 25.94 | 26.01 | 26.06 | 26.13 | 26.06 | 0.3%  |      |
| Large Pickup                  | 18.19 | 18.32 | 18.28 | 18.31 | 18.42 | 18.32 | 18.39 | 18.56 | 18.68 | 18.66 | 18.76 | 18.94 | 19.11 | 19.29 | 19.42 | 19.55 | 19.68 | 19.82 | 19.97 | 20.13 | 20.29 | 20.26 | 0.5%  |      |
| Small Van                     | 22.25 | 22.74 | 22.71 | 22.81 | 23.11 | 23.03 | 23.14 | 23.31 | 23.31 | 23.28 | 23.35 | 23.47 | 23.61 | 23.75 | 23.88 | 23.98 | 24.07 | 24.15 | 24.22 | 24.28 | 24.35 | 24.30 | 0.4%  |      |
| Large Van                     | 17.77 | 18.16 | 18.27 | 18.52 | 18.83 | 18.81 | 18.97 | 19.25 | 19.50 | 19.51 | 19.65 | 19.87 | 20.08 | 20.28 | 20.44 | 20.59 | 20.73 | 20.89 | 21.05 | 21.25 | 21.46 | 21.46 | 0.9%  |      |
| Small Utility                 | 20.67 | 21.17 | 21.16 | 21.30 | 21.60 | 21.53 | 21.54 | 21.68 | 21.87 | 21.86 | 21.94 | 22.08 | 22.24 | 22.38 | 22.52 | 22.63 | 22.73 | 22.81 | 22.88 | 22.96 | 23.05 | 23.03 | 0.5%  |      |
| Large Utility                 | 16.05 | 16.39 | 16.44 | 16.62 | 16.84 | 16.84 | 16.99 | 17.23 | 17.44 | 17.46 | 17.61 | 17.83 | 18.03 | 18.18 | 18.30 | 18.42 | 18.53 | 18.65 | 18.78 | 18.91 | 19.07 | 19.05 | 0.8%  |      |

**Table 57. New Light-Duty Vehicle Fuel Economy (2 of 4)  
(Miles per Gallon)**

|                                     | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |       |      |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|------|
| <b>Ethanol</b>                      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |      |
| Minicompact Cars                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |       |      |
| Subcompact Cars                     | 36.94 | 37.54 | 37.61 | 37.73 | 38.36 | 38.30 | 38.32 | 38.46 | 38.61 | 38.79 | 39.02 | 39.12 | 39.30 | 39.36 | 39.28 | 39.14 | 39.01 | 38.93 | 38.87 | 38.80 | 38.71 | 38.59 | 38.59     | 0.2%  |      |
| Compact Cars                        | 30.66 | 31.28 | 31.30 | 31.44 | 32.26 | 32.19 | 32.22 | 32.39 | 32.60 | 32.81 | 32.94 | 33.06 | 33.23 | 33.26 | 33.20 | 33.10 | 33.02 | 32.97 | 32.93 | 32.87 | 32.79 | 32.70 | 32.70     | 0.3%  |      |
| Midsize Cars                        | 29.00 | 29.60 | 29.63 | 29.83 | 30.45 | 30.41 | 30.52 | 30.75 | 31.01 | 31.24 | 31.42 | 31.58 | 31.79 | 31.81 | 31.81 | 31.77 | 31.74 | 31.72 | 31.71 | 31.69 | 31.67 | 31.64 | 31.64     | 0.4%  |      |
| Large Cars                          | 27.28 | 27.62 | 27.65 | 27.93 | 28.71 | 28.72 | 28.85 | 29.08 | 29.35 | 29.63 | 29.91 | 30.25 | 30.65 | 30.75 | 30.84 | 30.90 | 30.90 | 30.93 | 30.98 | 31.02 | 31.04 | 31.08 | 31.08     | 0.6%  |      |
| 2-Seater Cars                       | 29.79 | 30.28 | 30.52 | 30.96 | 31.89 | 31.98 | 32.35 | 32.80 | 33.21 | 33.59 | 33.93 | 34.23 | 34.55 | 34.67 | 34.78 | 34.87 | 34.95 | 35.04 | 35.10 | 35.17 | 35.23 | 35.29 | 35.29     | 0.8%  |      |
| Small Pickup                        | 25.09 | 25.60 | 25.55 | 25.62 | 25.85 | 25.75 | 25.68 | 25.73 | 25.85 | 25.78 | 25.82 | 25.91 | 26.02 | 26.13 | 26.23 | 26.31 | 26.37 | 26.43 | 26.49 | 26.54 | 26.61 | 26.54 | 26.54     | 0.3%  |      |
| Large Pickup                        | 18.54 | 18.68 | 18.64 | 18.67 | 18.78 | 18.68 | 18.75 | 18.92 | 19.04 | 19.02 | 19.12 | 19.30 | 19.47 | 19.65 | 19.79 | 19.92 | 20.05 | 20.19 | 20.33 | 20.50 | 20.67 | 20.63 | 20.63     | 0.5%  |      |
| Small Van                           | 22.69 | 23.18 | 23.15 | 23.25 | 23.56 | 23.48 | 23.47 | 23.59 | 23.76 | 23.72 | 23.80 | 23.91 | 24.06 | 24.19 | 24.32 | 24.42 | 24.51 | 24.59 | 24.67 | 24.72 | 24.79 | 24.74 | 24.74     | 0.4%  |      |
| Large Van                           | 18.12 | 18.51 | 18.63 | 18.88 | 19.20 | 19.18 | 19.34 | 19.62 | 19.87 | 19.88 | 20.02 | 20.23 | 20.45 | 20.64 | 20.82 | 20.97 | 21.11 | 21.26 | 21.43 | 21.63 | 21.85 | 21.84 | 21.84     | 0.9%  |      |
| Small Utility                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| Large Utility                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| <b>Ethanol Flex</b>                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |      |
| Minicompact Cars                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| Subcompact Cars                     | 35.86 | 36.45 | 36.52 | 36.65 | 37.31 | 37.25 | 37.27 | 37.41 | 37.57 | 37.75 | 37.96 | 38.07 | 38.25 | 38.30 | 38.22 | 38.08 | 37.96 | 37.89 | 37.83 | 37.77 | 37.67 | 37.55 | 37.55     | 0.2%  |      |
| Compact Cars                        | 29.77 | 30.39 | 30.40 | 30.55 | 31.38 | 31.31 | 31.35 | 31.52 | 31.72 | 31.93 | 32.06 | 32.18 | 32.35 | 32.37 | 32.32 | 32.23 | 32.14 | 32.10 | 32.06 | 32.00 | 31.92 | 31.83 | 31.83     | 0.3%  |      |
| Midsize Cars                        | 28.17 | 28.75 | 28.78 | 28.98 | 29.61 | 29.57 | 29.68 | 29.90 | 30.16 | 30.38 | 30.56 | 30.73 | 30.93 | 30.95 | 30.96 | 30.92 | 30.89 | 30.87 | 30.86 | 30.85 | 30.83 | 30.80 | 30.80     | 30.80 | 0.4% |
| Large Cars                          | 26.50 | 26.83 | 26.86 | 27.15 | 27.92 | 27.92 | 28.05 | 28.28 | 28.55 | 28.83 | 29.10 | 29.43 | 29.83 | 29.93 | 30.02 | 30.07 | 30.07 | 30.10 | 30.16 | 30.19 | 30.22 | 30.25 | 30.25     | 0.6%  |      |
| 2-Seater Cars                       | 28.94 | 29.42 | 29.66 | 30.08 | 31.02 | 31.11 | 31.47 | 31.91 | 32.31 | 32.68 | 33.02 | 33.31 | 33.62 | 33.74 | 33.85 | 33.94 | 34.03 | 34.10 | 34.17 | 34.23 | 34.30 | 34.35 | 34.35     | 0.8%  |      |
| Small Pickup                        | 24.36 | 24.86 | 24.81 | 24.88 | 25.11 | 25.01 | 24.94 | 24.99 | 25.10 | 25.04 | 25.08 | 25.18 | 25.30 | 25.40 | 25.51 | 25.58 | 25.65 | 25.70 | 25.77 | 25.82 | 25.89 | 25.82 | 25.82     | 0.3%  |      |
| Large Pickup                        | 18.01 | 18.14 | 18.10 | 18.13 | 18.24 | 18.15 | 18.22 | 18.38 | 18.50 | 18.48 | 18.59 | 18.76 | 18.93 | 19.11 | 19.24 | 19.37 | 19.50 | 19.64 | 19.78 | 19.94 | 20.11 | 20.07 | 20.07     | 0.5%  |      |
| Small Van                           | 22.04 | 22.52 | 22.49 | 22.59 | 22.88 | 22.81 | 22.80 | 22.91 | 23.09 | 23.05 | 23.13 | 23.25 | 23.39 | 23.53 | 23.66 | 23.76 | 23.85 | 23.93 | 24.00 | 24.06 | 24.13 | 24.08 | 24.08     | 0.4%  |      |
| Large Van                           | 17.59 | 17.98 | 18.10 | 18.34 | 18.65 | 18.63 | 18.79 | 19.06 | 19.31 | 19.32 | 19.46 | 19.69 | 19.90 | 20.09 | 20.25 | 20.40 | 20.54 | 20.70 | 20.87 | 21.06 | 21.26 | 21.26 | 21.26     | 0.9%  |      |
| Small Utility                       | 20.46 | 20.96 | 20.95 | 21.09 | 21.39 | 21.32 | 21.34 | 21.47 | 21.66 | 21.65 | 21.73 | 21.88 | 22.03 | 22.17 | 22.31 | 22.42 | 22.52 | 22.60 | 22.67 | 22.75 | 22.84 | 22.82 | 22.82     | 0.5%  |      |
| Large Utility                       | 15.90 | 16.23 | 16.29 | 16.46 | 16.68 | 16.68 | 16.83 | 17.06 | 17.27 | 17.30 | 17.45 | 17.67 | 17.87 | 18.02 | 18.14 | 18.25 | 18.36 | 18.48 | 18.62 | 18.74 | 18.90 | 18.88 | 18.88     | 0.8%  |      |
| <b>Compressed Natural Gas (CNG)</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |      |
| Minicompact Cars                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| Subcompact Cars                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| Compact Cars                        | 31.69 | 32.19 | 32.21 | 32.28 | 32.86 | 32.75 | 32.82 | 32.94 | 33.07 | 33.23 | 33.42 | 33.61 | 33.83 | 33.91 | 33.98 | 33.94 | 33.83 | 33.76 | 33.71 | 33.64 | 33.55 | 33.45 | 33.45     | 0.2%  |      |
| Midsize Cars                        | 30.02 | 30.51 | 30.56 | 30.69 | 31.10 | 31.02 | 31.15 | 31.33 | 31.53 | 31.70 | 31.95 | 32.18 | 32.44 | 32.56 | 32.66 | 32.67 | 32.62 | 32.59 | 32.57 | 32.53 | 32.50 | 32.46 | 32.46     | 0.4%  |      |
| Large Cars                          | 28.27 | 28.58 | 28.60 | 28.81 | 29.47 | 29.45 | 29.59 | 29.78 | 29.99 | 30.21 | 30.45 | 30.73 | 31.06 | 31.37 | 31.68 | 31.85 | 31.86 | 31.87 | 31.91 | 31.93 | 31.95 | 31.97 | 31.97     | 0.6%  |      |
| 2-Seater Cars                       | 30.89 | 31.37 | 31.63 | 32.07 | 32.97 | 33.06 | 33.45 | 33.91 | 34.33 | 34.71 | 35.06 | 35.37 | 35.69 | 35.81 | 35.92 | 36.01 | 36.08 | 36.17 | 36.25 | 36.30 | 36.37 | 36.42 | 36.42     | 0.8%  |      |
| Small Pickup                        | 25.95 | 26.46 | 26.39 | 26.46 | 26.68 | 26.55 | 26.47 | 26.52 | 26.63 | 26.50 | 26.49 | 26.53 | 26.59 | 26.66 | 26.71 | 26.74 | 26.75 | 26.77 | 26.88 | 26.99 | 27.10 | 27.10 | 27.10     | 0.2%  |      |
| Large Pickup                        | 19.23 | 19.37 | 19.32 | 19.35 | 19.45 | 19.34 | 19.42 | 19.58 | 19.71 | 19.66 | 19.74 | 19.89 | 20.03 | 20.19 | 20.31 | 20.41 | 20.50 | 20.61 | 20.72 | 20.86 | 20.99 | 21.09 | 21.09     | 0.4%  |      |
| Small Van                           | 23.52 | 24.00 | 23.97 | 24.06 | 24.36 | 24.27 | 24.25 | 24.37 | 24.55 | 24.45 | 24.49 | 24.56 | 24.66 | 24.75 | 24.84 | 24.90 | 24.94 | 24.99 | 25.11 | 25.21 | 25.30 | 25.33 | 25.33     | 0.3%  |      |
| Large Van                           | 18.80 | 19.20 | 19.32 | 19.57 | 19.89 | 19.86 | 20.03 | 20.32 | 20.58 | 20.57 | 20.67 | 20.85 | 21.03 | 21.20 | 21.35 | 21.47 | 21.58 | 21.70 | 21.84 | 21.99 | 22.17 | 22.32 | 22.32     | 0.8%  |      |
| Small Utility                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| Large Utility                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| <b>CNG Bi-Fuel</b>                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |      |
| Minicompact Cars                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| Subcompact Cars                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |      |
| Compact Cars                        | 29.35 | 29.84 | 29.86 | 29.94 | 30.56 | 30.46 | 30.51 | 30.64 | 30.77 | 30.92 | 31.10 | 31.28 | 31.49 | 31.58 | 31.65 | 31.62 | 31.51 | 31.46 | 31.40 | 31.33 | 31.26 | 31.17 | 31.17     | 0.3%  |      |
| Midsize Cars                        | 27.81 | 28.29 | 28.34 | 28.47 | 28.90 | 28.84 | 28.96 | 29.14 | 29.33 | 29.49 | 29.72 | 29.94 | 30.18 | 30.30 | 30.41 | 30.43 | 30.38 | 30.35 | 30.33 | 30.31 | 30.29 | 30.25 | 30.25     | 0.4%  |      |
| Large Cars                          | 26.19 | 26.50 | 26.52 | 26.78 | 27.38 | 27.36 | 27.49 | 27.68 | 27.89 | 28.10 | 28.33 | 28.61 | 28.93 | 29.22 | 29.52 | 29.65 | 29.64 | 29.67 | 29.71 | 29.74 | 29.75 | 29.77 | 29.77     | 0.6%  |      |
| 2-Seater Cars                       | 28.60 | 29.08 | 29.31 | 29.73 | 30.64 | 30.73 | 31.08 | 31.52 | 31.92 | 32.28 | 32.61 | 32.89 | 33.20 | 33.32 | 33.43 | 33.52 | 33.60 | 33.67 | 33.74 | 33.80 | 33.86 | 33.92 | 33.92     | 0.8%  |      |
| Small Pickup                        | 24.05 | 24.52 | 24.46 | 24.52 | 24.73 | 24.61 | 24.54 | 24.58 | 24.69 | 24.57 | 24.58 | 24.63 | 24.70 | 24.77 | 24.83 | 24.86 | 24.89 | 24.90 | 25.01 | 25.12 | 25.22 | 25.23 | 25.23     | 0.2%  |      |
| Large Pickup                        | 17.82 | 17.95 | 17.91 | 17.93 | 18.03 | 17.93 | 18.00 | 18.15 | 18.27 | 18.24 | 18.32 | 18.47 | 18.61 | 18.76 | 18.87 | 18.97 | 19.06 | 19.17 | 19.28 | 19.40 | 19.52 |       |           |       |      |

**Table 57. New Light-Duty Vehicle Fuel Economy (3 of 4)  
(Miles per Gallon)**

|                                      | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-<br>2020 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| <b>Liquefied Petroleum Gas (LPG)</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Minicompact Cars                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Subcompact Cars                      | 36.77 | 37.23 | 37.27 | 37.33 | 37.77 | 37.68 | 37.73 | 37.83 | 37.92 | 38.06 | 38.27 | 38.48 | 38.73 | 38.84 | 38.90 | 38.83 | 38.69 | 38.60 | 38.53 | 38.44 | 38.34 | 38.21 | 0.2%          |
| Compact Cars                         | 30.58 | 31.09 | 31.12 | 31.20 | 31.83 | 31.73 | 31.79 | 31.91 | 32.06 | 32.22 | 32.41 | 32.60 | 32.82 | 32.91 | 32.98 | 32.95 | 32.85 | 32.79 | 32.74 | 32.67 | 32.58 | 32.49 | 0.3%          |
| Midsize Cars                         | 28.95 | 29.44 | 29.49 | 29.62 | 30.06 | 29.99 | 30.12 | 30.30 | 30.50 | 30.68 | 30.92 | 31.15 | 31.41 | 31.53 | 31.64 | 31.66 | 31.61 | 31.58 | 31.56 | 31.54 | 31.51 | 31.47 | 0.4%          |
| Large Cars                           | 27.25 | 27.55 | 27.58 | 27.81 | 28.47 | 28.45 | 28.58 | 28.78 | 28.99 | 29.22 | 29.45 | 29.73 | 30.06 | 30.37 | 30.68 | 30.84 | 30.83 | 30.85 | 30.90 | 30.92 | 30.95 | 30.96 | 0.6%          |
| 2-Seater Cars                        | 29.78 | 30.26 | 30.50 | 30.94 | 31.87 | 31.96 | 32.33 | 32.78 | 33.19 | 33.56 | 33.91 | 34.21 | 34.52 | 34.64 | 34.75 | 34.84 | 34.92 | 35.01 | 35.07 | 35.14 | 35.20 | 35.26 | 0.8%          |
| Small Pickup                         | 25.01 | 25.50 | 25.44 | 25.51 | 25.74 | 25.63 | 25.55 | 25.61 | 25.73 | 25.60 | 25.61 | 25.66 | 25.74 | 25.81 | 25.87 | 25.90 | 25.92 | 25.94 | 26.06 | 26.17 | 26.27 | 26.28 | 0.2%          |
| Large Pickup                         | 18.53 | 18.66 | 18.62 | 18.64 | 18.75 | 18.65 | 18.72 | 18.89 | 19.01 | 18.97 | 19.06 | 19.22 | 19.36 | 19.52 | 19.63 | 19.74 | 19.83 | 19.94 | 20.06 | 20.19 | 20.31 | 20.42 | 0.4%          |
| Small Van                            | 22.66 | 23.14 | 23.10 | 23.20 | 23.50 | 23.42 | 23.41 | 23.53 | 23.71 | 23.62 | 23.67 | 23.75 | 23.85 | 23.95 | 24.05 | 24.11 | 24.16 | 24.21 | 24.32 | 24.43 | 24.51 | 24.55 | 0.4%          |
| Large Van                            | 18.10 | 18.50 | 18.61 | 18.87 | 19.18 | 19.15 | 19.32 | 19.60 | 19.85 | 19.85 | 19.96 | 20.16 | 20.34 | 20.51 | 20.65 | 20.78 | 20.89 | 21.01 | 21.14 | 21.30 | 21.47 | 21.62 | 0.8%          |
| Small Utility                        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Utility                        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| <b>LPG Bi-Fuel</b>                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Minicompact Cars                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Subcompact Cars                      | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Compact Cars                         | 29.41 | 29.92 | 29.95 | 30.03 | 30.69 | 30.59 | 30.65 | 30.77 | 30.92 | 31.07 | 31.26 | 31.45 | 31.66 | 31.76 | 31.83 | 31.80 | 31.71 | 31.66 | 31.60 | 31.53 | 31.44 | 31.35 | 0.3%          |
| Midsize Cars                         | 27.85 | 28.34 | 28.39 | 28.52 | 28.99 | 28.92 | 29.05 | 29.23 | 29.42 | 29.59 | 29.83 | 30.06 | 30.30 | 30.43 | 30.54 | 30.56 | 30.51 | 30.49 | 30.47 | 30.45 | 30.43 | 30.39 | 0.4%          |
| Large Cars                           | 26.22 | 26.52 | 26.55 | 26.80 | 27.44 | 27.41 | 27.54 | 27.74 | 27.95 | 28.17 | 28.40 | 28.68 | 29.01 | 29.31 | 29.61 | 29.75 | 29.74 | 29.77 | 29.82 | 29.85 | 29.86 | 29.88 | 0.6%          |
| 2-Seater Cars                        | 28.64 | 29.12 | 29.35 | 29.78 | 30.71 | 30.80 | 31.15 | 31.59 | 31.99 | 32.36 | 32.68 | 32.97 | 33.28 | 33.41 | 33.52 | 33.61 | 33.69 | 33.77 | 33.83 | 33.89 | 33.96 | 34.02 | 0.8%          |
| Small Pickup                         | 24.07 | 24.55 | 24.49 | 24.56 | 24.79 | 24.68 | 24.61 | 24.66 | 24.78 | 24.66 | 24.68 | 24.74 | 24.81 | 24.89 | 24.95 | 24.99 | 25.01 | 25.03 | 25.15 | 25.26 | 25.36 | 25.37 | 0.2%          |
| Large Pickup                         | 17.82 | 17.95 | 17.91 | 17.94 | 18.05 | 17.95 | 18.02 | 18.18 | 18.30 | 18.27 | 18.36 | 18.51 | 18.66 | 18.81 | 18.92 | 19.02 | 19.12 | 19.23 | 19.35 | 19.47 | 19.59 | 19.70 | 0.5%          |
| Small Van                            | 21.80 | 22.27 | 22.24 | 22.33 | 22.63 | 22.55 | 22.54 | 22.65 | 22.82 | 22.75 | 22.80 | 22.89 | 23.00 | 23.09 | 23.19 | 23.26 | 23.31 | 23.36 | 23.47 | 23.57 | 23.66 | 23.70 | 0.4%          |
| Large Van                            | 17.41 | 17.80 | 17.91 | 18.16 | 18.46 | 18.44 | 18.60 | 18.86 | 19.11 | 19.11 | 19.24 | 19.44 | 19.62 | 19.79 | 19.92 | 20.04 | 20.15 | 20.28 | 20.41 | 20.56 | 20.72 | 20.87 | 0.8%          |
| Small Utility                        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Utility                        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| <b>Electric</b>                      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Minicompact Cars                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Subcompact Cars                      | 36.00 | 35.40 | 35.07 | 34.87 | 37.92 | 41.17 | 45.50 | 51.02 | 58.17 | 57.91 | 57.62 | 57.38 | 57.13 | 56.92 | 56.75 | 56.58 | 56.44 | 56.27 | 56.08 | 55.97 | 55.84 | 55.75 | 2.0%          |
| Compact Cars                         | 31.29 | 30.86 | 30.62 | 30.47 | 33.09 | 35.98 | 39.78 | 44.63 | 50.92 | 50.74 | 50.58 | 50.44 | 50.30 | 50.19 | 50.09 | 49.95 | 49.84 | 49.70 | 49.56 | 49.50 | 49.41 | 49.34 | 2.1%          |
| Midsize Cars                         | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Cars                           | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| 2-Seater Cars                        | 29.31 | 28.85 | 28.60 | 28.43 | 30.86 | 33.53 | 37.03 | 41.51 | 47.33 | 47.10 | 46.89 | 46.73 | 46.57 | 46.44 | 46.32 | 46.17 | 46.05 | 45.92 | 45.80 | 45.73 | 45.66 | 45.59 | 2.0%          |
| Small Pickup                         | 27.63 | 27.18 | 26.87 | 26.65 | 28.99 | 31.45 | 34.64 | 38.71 | 44.04 | 43.66 | 43.31 | 43.01 | 42.72 | 42.43 | 42.15 | 41.89 | 41.63 | 41.40 | 41.21 | 41.04 | 40.86 | 40.70 | 1.8%          |
| Large Pickup                         | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Van                            | 23.58 | 23.35 | 23.12 | 22.98 | 25.15 | 27.32 | 30.11 | 33.68 | 38.35 | 38.02 | 37.74 | 37.48 | 37.22 | 36.96 | 36.71 | 36.47 | 36.25 | 36.03 | 35.86 | 35.71 | 35.56 | 35.42 | 1.9%          |
| Large Van                            | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Utility                        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Utility                        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| <b>Diesel-Electric Hybrid</b>        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Minicompact Cars                     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Subcompact Cars                      | 61.81 | 61.60 | 61.37 | 61.55 | 61.91 | 61.07 | 60.53 | 60.28 | 60.40 | 60.63 | 60.80 | 60.97 | 61.17 | 61.35 | 61.44 | 61.43 | 61.37 | 61.32 | 61.63 | 61.78 | 61.80 | 61.55 | 0.0%          |
| Compact Cars                         | 51.23 | 51.11 | 50.96 | 51.14 | 51.53 | 50.80 | 50.38 | 50.21 | 50.35 | 50.57 | 50.75 | 50.91 | 51.11 | 51.28 | 51.38 | 51.40 | 51.36 | 51.34 | 51.60 | 51.74 | 51.78 | 51.60 | 0.0%          |
| Midsize Cars                         | 48.10 | 48.02 | 47.87 | 48.03 | 48.35 | 47.72 | 47.45 | 47.41 | 47.66 | 47.99 | 48.28 | 48.56 | 48.84 | 49.10 | 49.28 | 49.40 | 49.48 | 49.52 | 49.83 | 50.04 | 50.15 | 50.05 | 0.2%          |
| Large Cars                           | 44.56 | 44.48 | 44.34 | 44.46 | 44.94 | 44.41 | 44.23 | 44.30 | 44.67 | 45.09 | 45.50 | 45.90 | 46.26 | 46.62 | 46.90 | 47.15 | 47.33 | 47.47 | 47.90 | 48.19 | 48.40 | 48.41 | 0.4%          |
| 2-Seater Cars                        | 46.71 | 46.60 | 46.45 | 46.61 | 46.99 | 46.52 | 46.49 | 46.70 | 47.22 | 47.79 | 48.32 | 48.85 | 49.32 | 49.79 | 50.21 | 50.59 | 50.92 | 51.14 | 51.65 | 52.06 | 52.37 | 52.45 | 0.5%          |
| Small Pickup                         | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Pickup                         | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Van                            | 37.03 | 37.60 | 37.68 | 38.03 | 38.61 | 38.28 | 38.18 | 38.33 | 38.72 | 38.57 | 38.62 | 38.68 | 38.73 | 38.80 | 38.84 | 38.85 | 38.80 | 38.75 | 38.93 | 39.02 | 39.04 | 38.90 | 0.2%          |
| Large Van                            | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Utility                        | 34.46 | 35.10 | 35.22 | 35.61 | 36.19 | 35.93 | 35.91 | 36.15 | 36.63 | 36.54 | 36.65 | 36.77 | 36.87 | 37.00 | 37.11 | 37.18 | 37.21 | 37.20 | 37.41 | 37.54 | 37.60 | 37.50 | 0.4%          |
| Large Utility                        | 27.69 | 28.23 | 28.37 | 28.75 | 29.20 | 29.01 | 29.05 | 29.28 | 29.72 | 29.65 | 29.76 | 29.91 | 30.07 | 30.24 | 30.36 | 30.47 | 30.54 | 30.58 | 30.81 | 30.95 | 31.03 | 30.96 | 0.5%          |

**Table 57. New Light-Duty Vehicle Fuel Economy (4 of 4)  
(Miles per Gallon)**

|                           | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-<br>2020 |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| <b>Fuel Cell Methanol</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Minicompact Cars          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Subcompact Cars           | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Compact Cars              | 55.19 | 54.42 | 54.00 | 53.73 | 53.42 | 52.71 | 52.34 | 52.06 | 51.79 | 51.61 | 51.45 | 51.30 | 51.16 | 51.04 | 50.94 | 50.80 | 50.69 | 50.55 | 50.41 | 50.34 | 50.26 | 50.18 | -0.4%         |
| Midsize Cars              | 48.00 | 47.35 | 46.99 | 46.74 | 46.66 | 46.07 | 45.75 | 45.51 | 45.28 | 45.14 | 45.01 | 44.90 | 44.81 | 44.76 | 44.71 | 44.62 | 44.57 | 44.48 | 44.39 | 44.34 | 44.27 | 44.21 | -0.4%         |
| Large Cars                | 43.23 | 42.65 | 42.35 | 42.04 | 41.70 | 41.22 | 40.97 | 40.78 | 40.61 | 40.42 | 40.26 | 40.10 | 39.93 | 39.81 | 39.70 | 39.60 | 39.55 | 39.47 | 39.42 | 39.35 | 39.30 | 39.26 | -0.4%         |
| 2-Seater Cars             | 51.68 | 50.88 | 50.43 | 50.14 | 49.82 | 49.12 | 48.72 | 48.42 | 48.13 | 47.91 | 47.69 | 47.53 | 47.36 | 47.24 | 47.11 | 46.96 | 46.83 | 46.70 | 46.58 | 46.51 | 46.44 | 46.37 | -0.5%         |
| Small Pickup              | 48.74 | 47.93 | 47.38 | 47.00 | 46.80 | 46.08 | 45.57 | 45.15 | 44.79 | 44.40 | 44.05 | 43.74 | 43.45 | 43.15 | 42.87 | 42.60 | 42.34 | 42.10 | 41.91 | 41.74 | 41.56 | 41.40 | -0.7%         |
| Large Pickup              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Van                 | 41.59 | 41.17 | 40.77 | 40.53 | 40.59 | 40.03 | 39.62 | 39.28 | 39.01 | 38.67 | 38.38 | 38.12 | 37.85 | 37.59 | 37.34 | 37.10 | 36.86 | 36.65 | 36.47 | 36.32 | 36.16 | 36.03 | -0.7%         |
| Large Van                 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Utility             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Utility             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
|                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| <b>Fuel Cell Hydrogen</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Minicompact Cars          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Subcompact Cars           | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Compact Cars              | 60.52 | 59.67 | 59.21 | 58.92 | 58.57 | 57.80 | 57.39 | 57.08 | 56.79 | 56.59 | 56.41 | 56.25 | 56.10 | 55.97 | 55.86 | 55.70 | 55.58 | 55.43 | 55.27 | 55.20 | 55.10 | 55.02 | -0.4%         |
| Midsize Cars              | 52.63 | 51.92 | 51.52 | 51.25 | 51.16 | 50.51 | 50.16 | 49.90 | 49.65 | 49.49 | 49.35 | 49.23 | 49.14 | 49.08 | 49.02 | 48.93 | 48.87 | 48.78 | 48.67 | 48.61 | 48.54 | 48.48 | -0.4%         |
| Large Cars                | 47.41 | 46.76 | 46.44 | 46.10 | 45.72 | 45.19 | 44.92 | 44.71 | 44.52 | 44.33 | 44.14 | 43.97 | 43.78 | 43.66 | 43.53 | 43.42 | 43.36 | 43.28 | 43.23 | 43.15 | 43.09 | 43.05 | -0.4%         |
| 2-Seater Cars             | 56.67 | 55.79 | 55.30 | 54.98 | 54.62 | 53.86 | 53.43 | 53.09 | 52.78 | 52.53 | 52.30 | 52.11 | 51.93 | 51.79 | 51.66 | 51.49 | 51.35 | 51.21 | 51.08 | 51.00 | 50.92 | 50.84 | -0.5%         |
| Small Pickup              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Pickup              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Van                 | 45.60 | 45.14 | 44.71 | 44.44 | 44.51 | 43.89 | 43.44 | 43.07 | 42.77 | 42.40 | 42.09 | 41.79 | 41.51 | 41.22 | 40.94 | 40.68 | 40.42 | 40.18 | 39.99 | 39.83 | 39.65 | 39.50 | -0.7%         |
| Large Van                 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Utility             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Utility             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
|                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| <b>Fuel Cell Gasoline</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Minicompact Cars          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Subcompact Cars           | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Compact Cars              | 51.72 | 50.99 | 50.60 | 50.35 | 50.05 | 49.39 | 49.04 | 48.78 | 48.53 | 48.36 | 48.21 | 48.07 | 47.94 | 47.83 | 47.73 | 47.60 | 47.50 | 47.37 | 47.23 | 47.17 | 47.09 | 47.02 | -0.4%         |
| Midsize Cars              | 44.97 | 44.37 | 44.03 | 43.80 | 43.72 | 43.17 | 42.87 | 42.65 | 42.43 | 42.29 | 42.18 | 42.07 | 41.99 | 41.94 | 41.89 | 41.81 | 41.76 | 41.68 | 41.59 | 41.54 | 41.48 | 41.43 | -0.4%         |
| Large Cars                | 40.51 | 39.96 | 39.69 | 39.40 | 39.07 | 38.62 | 38.39 | 38.21 | 38.05 | 37.88 | 37.72 | 37.57 | 37.41 | 37.31 | 37.20 | 37.11 | 37.06 | 36.99 | 36.94 | 36.88 | 36.83 | 36.79 | -0.4%         |
| 2-Seater Cars             | 48.43 | 47.68 | 47.26 | 46.98 | 46.68 | 46.03 | 45.66 | 45.37 | 45.10 | 44.89 | 44.69 | 44.54 | 44.38 | 44.26 | 44.14 | 44.00 | 43.88 | 43.76 | 43.65 | 43.59 | 43.51 | 43.45 | -0.5%         |
| Small Pickup              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Pickup              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Van                 | 38.97 | 38.58 | 38.21 | 37.98 | 38.04 | 37.50 | 37.12 | 36.81 | 36.55 | 36.23 | 35.97 | 35.72 | 35.47 | 35.22 | 34.98 | 34.76 | 34.54 | 34.34 | 34.18 | 34.03 | 33.89 | 33.76 | -0.7%         |
| Large Van                 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Small Utility             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |
| Large Utility             | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A           |

N/A = Not applicable.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1997 derived using: Energy and Environmental Analysis Inc., Updates to the Fuels Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration, Mid-Model Year Fuel Economy Reports for Auto Manufacturers, 1998; and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projection: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 58. New Light-Duty Vehicle Prices ( 1 of 4)  
(Thousands 1990 Dollars)**

1998-

|                               | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Gasoline                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minicompact Cars              | 28.1 | 28.3 | 28.4 | 28.4 | 28.5 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.7 | 28.8 | 28.8 | 28.8 | 28.9 | 29.0 | 29.0 | 29.1 | 29.1 | 29.2 | 29.2 | 0.2% |
| Subcompact Cars               | 13.0 | 13.3 | 13.4 | 13.5 | 13.6 | 13.8 | 13.9 | 13.9 | 13.9 | 14.0 | 14.0 | 14.0 | 14.1 | 14.1 | 14.2 | 14.2 | 14.3 | 14.3 | 14.4 | 14.5 | 14.5 | 14.6 | 0.5% |
| Compact Cars                  | 16.4 | 16.7 | 16.9 | 16.9 | 17.0 | 17.3 | 17.3 | 17.3 | 17.4 | 17.4 | 17.5 | 17.5 | 17.5 | 17.6 | 17.6 | 17.7 | 17.7 | 17.8 | 17.8 | 17.9 | 17.9 | 18.0 | 0.4% |
| Midsized Cars                 | 18.7 | 19.0 | 19.1 | 19.2 | 19.2 | 19.5 | 19.5 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.7 | 19.7 | 19.7 | 19.7 | 19.8 | 19.8 | 19.8 | 19.9 | 20.0 | 20.0 | 0.3% |
| Large Cars                    | 22.3 | 22.6 | 22.7 | 22.8 | 22.9 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.3 | 23.3 | 23.4 | 23.4 | 0.2% |
| 2-Seater Cars                 | 20.7 | 20.9 | 21.1 | 21.1 | 21.1 | 21.4 | 21.4 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.6 | 21.6 | 21.7 | 21.7 | 21.8 | 21.8 | 21.9 | 21.9 | 22.0 | 0.3% |
| Small Pickup                  | 13.1 | 13.2 | 13.3 | 13.4 | 13.4 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.8 | 13.8 | 13.8 | 13.9 | 13.9 | 14.0 | 14.0 | 14.1 | 14.2 | 0.4% |
| Large Pickup                  | 16.1 | 16.1 | 16.3 | 16.3 | 16.3 | 16.6 | 16.6 | 16.6 | 16.5 | 16.5 | 16.5 | 16.5 | 16.5 | 16.4 | 16.4 | 16.4 | 16.5 | 16.5 | 16.5 | 16.6 | 16.6 | 16.7 | 0.2% |
| Small Van                     | 18.7 | 18.9 | 19.1 | 19.1 | 19.2 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.6 | 19.6 | 19.7 | 19.7 | 19.8 | 19.9 | 0.3% |
| Large Van                     | 16.5 | 16.5 | 16.7 | 16.7 | 16.8 | 17.1 | 17.0 | 17.0 | 17.0 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.8 | 16.8 | 16.8 | 16.8 | 16.9 | 16.9 | 17.0 | 17.0 | 0.2% |
| Small Utility                 | 19.9 | 20.1 | 20.2 | 20.2 | 20.3 | 20.6 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.6 | 20.6 | 20.7 | 20.7 | 20.8 | 20.8 | 20.9 | 0.2% |
| Large Utility                 | 18.7 | 18.8 | 18.9 | 19.0 | 19.0 | 19.2 | 19.2 | 19.2 | 19.2 | 19.2 | 19.2 | 19.2 | 19.2 | 19.1 | 19.1 | 19.1 | 19.2 | 19.2 | 19.2 | 19.3 | 19.3 | 19.4 | 0.2% |
| Turbo Direct Injection Diesel |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minicompact Cars              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A  |
| Subcompact Cars               | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A  |
| Compact Cars                  | 16.6 | 16.8 | 17.0 | 17.0 | 17.8 | 18.1 | 18.1 | 18.1 | 18.2 | 18.2 | 18.3 | 18.3 | 18.3 | 18.4 | 18.4 | 18.4 | 18.5 | 18.6 | 18.6 | 18.7 | 18.7 | 18.8 | 0.6% |
| Midsized Cars                 | 19.7 | 20.0 | 20.2 | 20.2 | 20.1 | 20.2 | 20.1 | 20.2 | 20.1 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.1 | 20.1 | 20.2 | 20.2 | 20.2 | 20.3 | 20.4 | 20.4 | 0.2% |
| Large Cars                    | 23.1 | 23.4 | 23.5 | 23.6 | 23.7 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.1 | 24.1 | 24.2 | 24.2 | 0.2% |
| 2-Seater Cars                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A  |
| Small Pickup                  | 14.6 | 14.8 | 14.9 | 15.0 | 15.0 | 15.1 | 15.0 | 15.2 | 15.2 | 15.2 | 15.1 | 15.1 | 15.1 | 15.1 | 15.1 | 15.1 | 15.2 | 15.2 | 15.3 | 15.4 | 15.5 | 15.5 | 0.3% |
| Large Pickup                  | 18.6 | 18.6 | 18.8 | 18.8 | 18.7 | 18.8 | 18.6 | 19.1 | 19.1 | 19.0 | 19.0 | 19.0 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 19.0 | 19.0 | 19.1 | 19.1 | 0.1% |
| Small Van                     | 20.5 | 20.8 | 20.9 | 21.0 | 21.0 | 21.1 | 21.0 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.3 | 21.3 | 21.4 | 21.4 | 21.5 | 21.5 | 21.6 | 21.7 | 0.2% |
| Large Van                     | 18.9 | 18.9 | 19.1 | 19.1 | 19.2 | 19.5 | 19.4 | 19.4 | 19.4 | 19.3 | 19.3 | 19.3 | 19.2 | 19.2 | 19.2 | 19.1 | 19.2 | 19.2 | 19.2 | 19.2 | 19.3 | 19.3 | 0.1% |
| Small Utility                 | 22.1 | 22.3 | 22.4 | 22.3 | 22.2 | 22.3 | 22.1 | 22.3 | 22.2 | 22.1 | 22.0 | 22.0 | 22.0 | 22.0 | 22.1 | 22.1 | 22.2 | 22.2 | 22.2 | 22.3 | 22.4 | 22.4 | 0.1% |
| Large Utility                 | 24.4 | 24.5 | 24.6 | 24.7 | 24.6 | 24.7 | 24.5 | 25.0 | 25.0 | 25.0 | 24.9 | 24.9 | 24.9 | 24.8 | 24.8 | 24.8 | 24.9 | 24.9 | 24.9 | 25.0 | 25.0 | 25.1 | 0.1% |
| Methanol                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minicompact Cars              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A  |
| Subcompact Cars               | 13.4 | 13.6 | 13.8 | 13.9 | 13.9 | 14.2 | 14.2 | 14.3 | 14.3 | 14.3 | 14.4 | 14.4 | 14.4 | 14.5 | 14.5 | 14.6 | 14.7 | 14.7 | 14.8 | 14.8 | 14.9 | 15.0 | 0.5% |
| Compact Cars                  | 16.9 | 17.2 | 17.4 | 17.4 | 17.5 | 17.8 | 17.8 | 17.9 | 17.9 | 17.8 | 17.7 | 17.6 | 17.6 | 17.9 | 18.0 | 18.0 | 18.1 | 18.1 | 18.2 | 18.2 | 18.3 | 18.4 | 0.4% |
| Midsized Cars                 | 19.6 | 19.9 | 20.1 | 20.1 | 20.2 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.4 | 20.3 | 20.2 | 20.2 | 20.1 | 20.1 | 20.1 | 20.2 | 20.2 | 20.3 | 20.4 | 20.4 | 0.2% |
| Large Cars                    | 22.7 | 23.0 | 23.1 | 23.2 | 23.3 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.7 | 23.7 | 23.8 | 0.2% |
| 2-Seater Cars                 | 21.0 | 21.3 | 21.4 | 21.5 | 21.5 | 21.8 | 21.8 | 21.8 | 21.8 | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 | 22.0 | 22.0 | 22.1 | 22.2 | 22.2 | 22.3 | 22.3 | 22.4 | 0.3% |
| Small Pickup                  | 14.5 | 14.7 | 14.8 | 14.9 | 14.9 | 15.2 | 15.1 | 15.1 | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | 15.3 | 15.3 | 15.4 | 15.4 | 15.5 | 15.5 | 15.6 | 15.7 | 0.3% |
| Large Pickup                  | 18.0 | 18.1 | 18.2 | 18.2 | 18.3 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.5 | 18.6 | 0.1% |
| Small Van                     | 20.4 | 20.7 | 20.8 | 20.9 | 20.9 | 21.2 | 21.1 | 21.1 | 21.1 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.3 | 21.3 | 21.4 | 21.4 | 21.5 | 21.6 | 21.6 | 0.3% |
| Large Van                     | 18.3 | 18.4 | 18.5 | 18.6 | 18.6 | 18.9 | 18.9 | 18.8 | 18.8 | 18.8 | 18.8 | 18.7 | 18.7 | 18.7 | 18.7 | 18.6 | 18.7 | 18.7 | 18.7 | 18.7 | 18.8 | 18.8 | 0.1% |
| Small Utility                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A  |
| Large Utility                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A  |
| Methanol Flex                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minicompact Cars              | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A  |
| Subcompact Cars               | 13.4 | 13.7 | 13.8 | 13.9 | 14.0 | 14.2 | 14.3 | 14.3 | 14.3 | 14.4 | 14.4 | 14.4 | 14.5 | 14.5 | 14.6 | 14.6 | 14.7 | 14.7 | 14.8 | 14.9 | 14.9 | 15.0 | 0.5% |
| Compact Cars                  | 16.8 | 17.1 | 17.3 | 17.3 | 17.4 | 17.7 | 17.7 | 17.8 | 17.8 | 17.8 | 17.9 | 17.9 | 17.9 | 18.0 | 18.0 | 18.1 | 18.1 | 18.2 | 18.2 | 18.3 | 18.3 | 18.4 | 0.4% |
| Midsized Cars                 | 19.1 | 19.4 | 19.5 | 19.6 | 19.7 | 19.9 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.1 | 20.1 | 20.1 | 20.1 | 20.2 | 19.8 | 19.9 | 20.0 | 20.0 | 20.1 | 0.2% |
| Large Cars                    | 22.7 | 23.0 | 23.1 | 23.2 | 23.3 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.7 | 23.7 | 23.8 | 23.8 | 0.2% |
| 2-Seater Cars                 | 21.1 | 21.3 | 21.5 | 21.5 | 21.6 | 21.8 | 21.8 | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 | 22.0 | 22.0 | 22.0 | 22.1 | 22.1 | 22.2 | 22.2 | 22.3 | 22.4 | 22.4 | 0.3% |
| Small Pickup                  | 14.5 | 14.5 | 14.6 | 14.5 | 14.5 | 14.8 | 14.8 | 14.8 | 14.8 | 14.9 | 15.0 | 15.0 | 15.1 | 15.2 | 15.3 | 15.4 | 15.5 | 15.6 | 15.6 | 15.7 | 15.7 | 15.8 | 0.4% |
| Large Pickup                  | 18.2 | 18.2 | 18.2 | 18.2 | 18.2 | 18.5 | 18.5 | 18.5 | 18.5 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.7 | 18.7 | 18.8 | 0.1% |
| Small Van                     | 20.5 | 20.8 | 21.0 | 21.0 | 21.0 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.4 | 21.4 | 21.5 | 21.5 | 21.6 | 21.6 | 21.7 | 21.8 | 0.3% |
| Large Van                     | 18.5 | 18.5 | 18.7 | 18.7 | 18.8 | 19.1 | 19.0 | 19.0 | 19.0 | 19.0 | 18.9 | 18.9 | 18.9 | 18.9 | 18.8 | 18.8 | 18.8 | 18.9 | 18.9 | 18.9 | 19.0 | 19.0 | 0.1% |
| Small Utility                 | 21.3 | 21.3 | 21.4 | 21.3 | 21.3 | 21.6 | 21.6 | 21.5 | 21.5 | 21.6 | 21.6 | 21.6 | 21.6 | 21.6 | 21.6 | 21.7 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 0.2% |
| Large Utility                 | 24.0 | 24.1 | 24.2 | 24.3 | 24.3 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.5 | 24.5 | 24.5 | 24.5 | 24.5 | 24.6 | 24.6 | 24.6 | 24.7 | 24.8 | 0.1% |



**Table 58. New Light-Duty Vehicle Prices (3 of 4)  
(Thousands 1990 Dollars)**

|                                      | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|
| <b>Liquefied Petroleum Gas (LPG)</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Minicompact Cars                     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Subcompact Cars                      | 15.1 | 15.4 | 15.5 | 15.6 | 15.7 | 15.9 | 16.0 | 16.0 | 16.0 | 16.1 | 16.1 | 16.2 | 16.2 | 16.3 | 16.3 | 16.4 | 16.4 | 16.5 | 16.5 | 16.6 | 16.7 | 16.7 | 0.5%      |
| Compact Cars                         | 19.1 | 19.3 | 19.5 | 19.6 | 19.6 | 19.9 | 19.9 | 20.0 | 20.0 | 20.0 | 20.1 | 20.1 | 20.2 | 20.2 | 20.3 | 20.3 | 20.4 | 20.4 | 20.5 | 20.6 | 20.6 | 20.7 | 0.4%      |
| Midsize Cars                         | 22.5 | 22.8 | 23.0 | 23.0 | 23.0 | 23.3 | 23.3 | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 23.5 | 23.5 | 23.5 | 23.6 | 23.6 | 23.7 | 23.7 | 23.8 | 23.9 | 0.3%      |
| Large Cars                           | 23.8 | 24.1 | 24.2 | 24.3 | 24.4 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.8 | 24.8 | 24.9 | 0.2%      |
| 2-Seater Cars                        | 21.6 | 21.8 | 22.0 | 22.0 | 22.1 | 22.3 | 22.4 | 22.4 | 22.4 | 22.4 | 22.4 | 22.4 | 22.5 | 22.5 | 22.5 | 22.6 | 22.7 | 22.7 | 22.7 | 22.8 | 22.9 | 22.9 | 0.3%      |
| Small Pickup                         | 17.4 | 17.6 | 17.7 | 17.8 | 17.8 | 18.0 | 18.0 | 18.0 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 | 18.2 | 18.2 | 18.3 | 18.3 | 18.4 | 18.5 | 18.5 | 0.3%      |
| Large Pickup                         | 21.6 | 21.7 | 21.8 | 21.9 | 21.9 | 22.2 | 22.2 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.2 | 22.0 | 22.0 | 22.0 | 22.0 | 22.0 | 22.0 | 22.1 | 22.2 | 22.2 | 0.1%      |
| Small Van                            | 23.3 | 23.6 | 23.7 | 23.7 | 23.8 | 24.1 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.1 | 24.1 | 24.2 | 24.2 | 24.3 | 24.4 | 24.4 | 24.5 | 0.2%      |
| Large Van                            | 21.9 | 22.0 | 22.1 | 22.2 | 22.2 | 22.5 | 22.5 | 22.5 | 22.5 | 22.4 | 22.4 | 22.4 | 22.3 | 22.3 | 22.3 | 22.2 | 22.3 | 22.3 | 22.3 | 22.3 | 22.4 | 22.4 | 0.1%      |
| Small Utility                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Large Utility                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
|                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
|                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| <b>LPG Bi-Fuel</b>                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Minicompact Cars                     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Subcompact Cars                      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Compact Cars                         | 20.1 | 20.3 | 20.5 | 20.6 | 20.6 | 20.9 | 20.9 | 21.0 | 21.0 | 21.0 | 21.1 | 21.1 | 21.2 | 21.2 | 21.3 | 21.3 | 21.4 | 21.4 | 21.5 | 21.6 | 21.6 | 21.7 | 0.4%      |
| Midsize Cars                         | 23.5 | 23.8 | 24.0 | 24.0 | 24.0 | 24.3 | 24.3 | 24.4 | 24.4 | 24.4 | 24.4 | 24.4 | 24.4 | 24.5 | 24.5 | 24.5 | 24.6 | 24.6 | 24.7 | 24.7 | 24.8 | 24.9 | 0.3%      |
| Large Cars                           | 24.8 | 25.1 | 25.2 | 25.3 | 25.4 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.8 | 25.8 | 25.9 | 0.2%      |
| 2-Seater Cars                        | 22.6 | 22.8 | 23.0 | 23.0 | 23.1 | 23.3 | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 23.5 | 23.5 | 23.5 | 23.6 | 23.7 | 23.7 | 23.7 | 23.8 | 23.9 | 23.9 | 0.3%      |
| Small Pickup                         | 18.4 | 18.6 | 18.7 | 18.8 | 18.8 | 19.0 | 19.0 | 19.0 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 | 19.2 | 19.2 | 19.3 | 19.3 | 19.4 | 19.5 | 19.5 | 0.3%      |
| Large Pickup                         | 22.6 | 22.7 | 22.8 | 22.9 | 22.9 | 23.2 | 23.2 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 23.1 | 23.2 | 23.2 | 0.1%      |
| Small Van                            | 24.3 | 24.6 | 24.7 | 24.7 | 24.8 | 25.1 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.1 | 25.1 | 25.2 | 25.2 | 25.3 | 25.4 | 25.4 | 25.5 | 0.2%      |
| Large Van                            | 22.9 | 23.0 | 23.1 | 23.2 | 23.2 | 23.5 | 23.5 | 23.5 | 23.5 | 23.4 | 23.4 | 23.4 | 23.3 | 23.3 | 23.3 | 23.2 | 23.3 | 23.3 | 23.3 | 23.3 | 23.4 | 23.4 | 0.1%      |
| Small Utility                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Large Utility                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
|                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| <b>Electric</b>                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Minicompact Cars                     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Subcompact Cars                      | 28.0 | 28.0 | 28.0 | 27.8 | 28.2 | 28.9 | 29.2 | 29.5 | 29.8 | 29.5 | 29.3 | 29.1 | 28.9 | 28.7 | 28.5 | 28.4 | 28.2 | 28.3 | 28.4 | 28.4 | 28.4 | 28.5 | 0.1%      |
| Compact Cars                         | 32.7 | 32.7 | 32.7 | 32.4 | 32.8 | 33.6 | 33.9 | 34.3 | 34.6 | 34.3 | 34.0 | 33.7 | 33.5 | 33.2 | 33.1 | 32.9 | 32.7 | 32.8 | 32.8 | 32.9 | 32.9 | 33.0 | 0.0%      |
| Midsize Cars                         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Large Cars                           | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| 2-Seater Cars                        | 33.7 | 33.7 | 33.6 | 33.4 | 23.8 | 24.6 | 25.0 | 25.4 | 25.7 | 25.4 | 25.1 | 24.8 | 24.6 | 24.3 | 24.1 | 24.0 | 23.8 | 23.8 | 23.9 | 23.9 | 24.0 | 24.0 | -1.5%     |
| Small Pickup                         | 31.4 | 31.4 | 31.3 | 31.1 | 31.5 | 32.3 | 32.8 | 33.2 | 33.6 | 33.3 | 33.0 | 32.7 | 32.5 | 32.3 | 32.1 | 31.9 | 31.8 | 31.8 | 31.9 | 32.0 | 32.1 | 32.1 | 0.1%      |
| Large Pickup                         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Small Van                            | 38.4 | 38.3 | 38.2 | 37.9 | 38.4 | 39.2 | 39.7 | 40.1 | 40.6 | 40.3 | 39.9 | 39.6 | 39.3 | 39.0 | 38.8 | 38.6 | 38.4 | 38.5 | 38.6 | 38.7 | 38.8 | 38.9 | 0.1%      |
| Large Van                            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Small Utility                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Large Utility                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
|                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| <b>Diesel-Electric Hybrid</b>        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Minicompact Cars                     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Subcompact Cars                      | 39.5 | 39.8 | 39.9 | 39.9 | 25.3 | 25.4 | 25.3 | 25.3 | 25.2 | 25.2 | 25.1 | 25.1 | 25.0 | 25.0 | 25.0 | 25.1 | 25.1 | 25.1 | 25.2 | 25.3 | 25.4 | 25.4 | -2.0%     |
| Compact Cars                         | 46.4 | 46.7 | 46.8 | 46.8 | 29.7 | 29.9 | 29.8 | 29.7 | 29.6 | 29.5 | 29.5 | 29.4 | 29.3 | 29.3 | 29.3 | 29.3 | 29.4 | 29.5 | 29.5 | 29.6 | 29.7 | 29.7 | -2.0%     |
| Midsize Cars                         | 52.1 | 52.4 | 52.5 | 52.4 | 32.9 | 33.0 | 32.9 | 32.7 | 32.6 | 32.5 | 32.4 | 32.3 | 32.2 | 32.1 | 32.1 | 32.1 | 32.1 | 32.2 | 32.2 | 32.3 | 32.3 | 32.4 | -2.1%     |
| Large Cars                           | 56.5 | 56.7 | 56.8 | 56.7 | 34.8 | 34.9 | 34.7 | 34.6 | 34.4 | 34.2 | 34.1 | 33.9 | 33.8 | 33.7 | 33.7 | 33.6 | 33.6 | 33.6 | 33.7 | 33.8 | 33.8 | 33.9 | -2.3%     |
| 2-Seater Cars                        | 48.7 | 49.0 | 49.1 | 49.1 | 30.6 | 30.7 | 30.6 | 30.4 | 30.3 | 30.2 | 30.0 | 29.9 | 29.8 | 29.8 | 29.7 | 29.7 | 29.6 | 29.7 | 29.7 | 29.8 | 29.9 | 29.9 | -2.2%     |
| Small Pickup                         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Large Pickup                         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Small Van                            | 56.9 | 57.1 | 57.3 | 57.2 | 34.5 | 34.6 | 34.4 | 34.2 | 34.1 | 33.9 | 33.8 | 33.6 | 33.5 | 33.4 | 33.4 | 33.3 | 33.3 | 33.4 | 33.4 | 33.5 | 33.5 | 33.6 | -2.4%     |
| Large Van                            | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A       |
| Small Utility                        | 59.5 | 59.7 | 59.8 | 59.7 | 36.2 | 36.3 | 36.1 | 35.9 | 35.8 | 35.6 | 35.5 | 35.3 | 35.2 | 35.1 | 35.0 | 34.9 | 34.9 | 34.9 | 35.0 | 35.1 | 35.1 | 35.2 | -2.4%     |
| Large Utility                        | 67.8 | 67.8 | 67.9 | 67.9 | 39.2 | 39.3 | 39.0 | 38.8 | 38.5 | 38.3 | 38.1 | 37.9 | 37.7 | 37.6 | 37.5 | 37.4 | 37.3 | 37.4 | 37.4 | 37.5 | 37.5 | 37.6 | -2.6%     |

**Table 58. New Light-Duty Vehicle Prices (4 of 4)  
(Thousands 1990 Dollars)**

|                    | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-<br>2020 |
|--------------------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| Fuel Cell Methanol |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |
| Minicompact Cars   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Subcompact Cars    | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Compact Cars       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 74.8  | 68.2 | 62.5 | 57.6 | 53.3 | 49.6 | 46.4 | 43.7 | 41.4 | 39.4 | 37.7 | 36.3 | 35.1 | 34.0 | 33.1 | 32.3 | N/A           |
| Midsize Cars       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 84.2  | 76.7 | 70.2 | 64.5 | 59.6 | 55.4 | 51.8 | 48.6 | 46.0 | 43.7 | 41.8 | 40.1 | 38.7 | 37.5 | 36.4 | 35.5 | N/A           |
| Large Cars         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 92.0  | 83.5 | 76.2 | 70.0 | 64.5 | 59.8 | 55.8 | 52.3 | 49.4 | 46.9 | 44.7 | 42.8 | 41.2 | 39.8 | 38.6 | 37.6 | N/A           |
| 2-Seater Cars      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 78.9  | 71.9 | 65.8 | 60.5 | 55.9 | 52.0 | 48.6 | 45.6 | 43.1 | 41.0 | 39.2 | 37.6 | 36.3 | 35.1 | 34.1 | 33.2 | N/A           |
| Small Pickup       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 79.7  | 72.4 | 65.9 | 60.4 | 55.6 | 51.3 | 47.7 | 44.6 | 42.0 | 39.7 | 37.7 | 36.0 | 34.5 | 33.2 | 32.1 | 31.2 | N/A           |
| Large Pickup       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Small Van          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 93.6  | 85.0 | 77.6 | 71.3 | 65.7 | 60.9 | 56.7 | 53.1 | 50.1 | 47.5 | 45.2 | 43.2 | 41.5 | 40.1 | 38.8 | 37.7 | N/A           |
| Large Van          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Small Utility      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Large Utility      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Fuel Cell Hydrogen |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |
| Minicompact Cars   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Subcompact Cars    | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Compact Cars       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 65.4  | 60.8 | 56.9 | 53.5 | 50.5 | 47.9 | 45.7 | 43.9 | 42.3 | 40.9 | 39.7 | 38.7 | 37.9 | 37.2 | 36.5 | 36.0 | N/A           |
| Midsize Cars       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 72.8  | 67.5 | 63.0 | 59.1 | 55.7 | 52.7 | 50.2 | 48.0 | 46.2 | 44.7 | 43.3 | 42.2 | 41.2 | 40.4 | 39.7 | 39.0 | N/A           |
| Large Cars         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 78.6  | 72.7 | 67.6 | 63.3 | 59.5 | 56.2 | 53.5 | 51.0 | 49.0 | 47.3 | 45.7 | 44.5 | 43.4 | 42.4 | 41.6 | 40.9 | N/A           |
| 2-Seater Cars      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 68.5  | 63.6 | 59.4 | 55.7 | 52.5 | 49.7 | 47.4 | 45.3 | 43.6 | 42.2 | 40.9 | 39.8 | 38.9 | 38.1 | 37.4 | 36.8 | N/A           |
| Small Pickup       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Large Pickup       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Small Van          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 79.5  | 73.6 | 68.5 | 64.0 | 60.2 | 56.8 | 53.9 | 51.4 | 49.3 | 47.5 | 46.0 | 44.6 | 43.5 | 42.5 | 41.6 | 40.8 | N/A           |
| Large Van          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Small Utility      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Large Utility      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Fuel Cell Gasoline |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |
| Minicompact Cars   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Subcompact Cars    | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Compact Cars       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 82.1  | 74.5 | 67.9 | 62.2 | 57.3 | 53.1 | 49.4 | 46.3 | 43.6 | 41.3 | 39.4 | 37.7 | 36.3 | 35.0 | 34.0 | 33.0 | N/A           |
| Midsize Cars       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 92.6  | 83.9 | 76.4 | 69.9 | 64.2 | 59.3 | 55.2 | 51.6 | 48.5 | 45.9 | 43.6 | 41.7 | 40.0 | 38.6 | 37.4 | 36.4 | N/A           |
| Large Cars         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 101.3 | 91.5 | 83.1 | 75.9 | 69.7 | 64.2 | 59.6 | 55.6 | 52.2 | 49.3 | 46.7 | 44.6 | 42.7 | 41.1 | 39.8 | 38.6 | N/A           |
| 2-Seater Cars      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 86.8  | 78.7 | 71.6 | 65.6 | 60.3 | 55.7 | 51.8 | 48.4 | 45.5 | 43.1 | 40.9 | 39.1 | 37.6 | 36.2 | 35.1 | 34.1 | N/A           |
| Small Pickup       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Large Pickup       | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Small Van          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 103.2 | 93.4 | 84.8 | 77.5 | 71.1 | 65.5 | 60.7 | 56.6 | 53.1 | 50.0 | 47.4 | 45.1 | 43.2 | 41.5 | 40.0 | 38.8 | N/A           |
| Large Van          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Small Utility      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |
| Large Utility      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | N/A           |

N/A = Not applicable.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy and Environmental Analysis Inc., Updates to the Fuels Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); and and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projection: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 59. New Light-Duty Vehicle Range (1 of 4)  
(Miles)**

1998-

|                                      | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>Gasoline</b>                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minicompact Cars                     | 468  | 478  | 480  | 486  | 500  | 500  | 505  | 511  | 517  | 522  | 527  | 529  | 531  | 533  | 534  | 534  | 535  | 536  | 536  | 537  | 537  | 537  | 0.6% |
| Subcompact Cars                      | 463  | 472  | 473  | 476  | 485  | 485  | 486  | 488  | 491  | 493  | 496  | 498  | 500  | 500  | 500  | 498  | 497  | 496  | 495  | 495  | 494  | 492  | 0.3% |
| Compact Cars                         | 460  | 470  | 471  | 474  | 487  | 487  | 488  | 491  | 494  | 498  | 500  | 503  | 507  | 507  | 507  | 506  | 505  | 504  | 504  | 503  | 502  | 501  | 0.4% |
| Midsized Cars                        | 458  | 467  | 468  | 472  | 482  | 482  | 484  | 487  | 492  | 496  | 499  | 503  | 507  | 508  | 508  | 508  | 507  | 507  | 507  | 507  | 507  | 507  | 0.5% |
| Large Cars                           | 501  | 508  | 509  | 515  | 529  | 529  | 532  | 537  | 542  | 548  | 553  | 559  | 567  | 569  | 571  | 572  | 572  | 572  | 573  | 574  | 575  | 575  | 0.6% |
| 2-Seater Cars                        | 463  | 471  | 473  | 477  | 489  | 489  | 492  | 497  | 501  | 505  | 509  | 511  | 514  | 514  | 515  | 515  | 515  | 515  | 515  | 515  | 515  | 514  | 0.5% |
| Small Pickup                         | 411  | 418  | 417  | 418  | 421  | 419  | 418  | 418  | 419  | 417  | 417  | 419  | 421  | 423  | 425  | 426  | 427  | 428  | 430  | 431  | 434  | 432  | 0.2% |
| Large Pickup                         | 398  | 401  | 401  | 401  | 404  | 402  | 403  | 407  | 409  | 409  | 411  | 415  | 419  | 423  | 426  | 429  | 432  | 435  | 438  | 441  | 445  | 444  | 0.5% |
| Small Van                            | 468  | 478  | 479  | 481  | 486  | 486  | 487  | 489  | 492  | 489  | 489  | 491  | 494  | 496  | 498  | 500  | 501  | 504  | 506  | 510  | 513  | 512  | 0.4% |
| Large Van                            | 436  | 445  | 448  | 454  | 462  | 462  | 466  | 472  | 478  | 479  | 482  | 488  | 493  | 498  | 502  | 506  | 509  | 513  | 517  | 522  | 527  | 527  | 0.9% |
| Small Utility                        | 415  | 425  | 425  | 428  | 434  | 433  | 433  | 436  | 440  | 439  | 440  | 443  | 446  | 449  | 451  | 454  | 455  | 457  | 459  | 461  | 464  | 464  | 0.5% |
| Large Utility                        | 402  | 410  | 412  | 416  | 422  | 422  | 425  | 431  | 437  | 437  | 441  | 447  | 452  | 456  | 459  | 461  | 464  | 467  | 471  | 474  | 478  | 478  | 0.8% |
| <b>Turbo Direct Injection Diesel</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minicompact Cars                     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A  |
| Subcompact Cars                      | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A  |
| Compact Cars                         | 598  | 612  | 612  | 615  | 632  | 631  | 632  | 635  | 639  | 643  | 646  | 648  | 652  | 652  | 651  | 649  | 648  | 647  | 646  | 645  | 643  | 641  | 0.3% |
| Midsized Cars                        | 622  | 635  | 636  | 641  | 655  | 654  | 657  | 662  | 667  | 672  | 676  | 680  | 684  | 685  | 685  | 684  | 683  | 683  | 683  | 683  | 682  | 682  | 0.4% |
| Large Cars                           | 691  | 700  | 701  | 709  | 729  | 729  | 732  | 739  | 745  | 753  | 760  | 769  | 779  | 782  | 784  | 785  | 785  | 786  | 787  | 789  | 789  | 790  | 0.6% |
| 2-Seater Cars                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A  |
| Small Pickup                         | 555  | 567  | 566  | 567  | 573  | 571  | 569  | 570  | 573  | 571  | 572  | 574  | 577  | 580  | 582  | 584  | 585  | 587  | 588  | 589  | 591  | 589  | 0.3% |
| Large Pickup                         | 542  | 546  | 545  | 546  | 549  | 546  | 549  | 553  | 557  | 556  | 560  | 565  | 570  | 575  | 579  | 583  | 587  | 591  | 596  | 601  | 606  | 605  | 0.5% |
| Small Van                            | 590  | 603  | 602  | 605  | 613  | 611  | 614  | 618  | 620  | 623  | 627  | 630  | 634  | 637  | 639  | 641  | 643  | 645  | 647  | 645  | 647  | 645  | 0.4% |
| Large Van                            | 588  | 601  | 605  | 613  | 624  | 623  | 629  | 638  | 646  | 646  | 651  | 659  | 666  | 672  | 678  | 683  | 687  | 693  | 698  | 705  | 712  | 712  | 0.9% |
| Small Utility                        | 548  | 561  | 561  | 565  | 572  | 571  | 571  | 575  | 580  | 580  | 582  | 586  | 590  | 594  | 597  | 600  | 603  | 605  | 607  | 609  | 612  | 611  | 0.5% |
| Large Utility                        | 638  | 651  | 654  | 660  | 669  | 670  | 675  | 685  | 693  | 695  | 701  | 709  | 717  | 723  | 728  | 733  | 737  | 742  | 748  | 753  | 759  | 758  | 0.8% |
| <b>Methanol</b>                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minicompact Cars                     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A  |
| Subcompact Cars                      | 292  | 298  | 298  | 299  | 305  | 305  | 305  | 306  | 307  | 309  | 310  | 311  | 313  | 313  | 312  | 311  | 310  | 310  | 309  | 309  | 308  | 307  | 0.2% |
| Compact Cars                         | 279  | 285  | 286  | 287  | 295  | 294  | 295  | 296  | 298  | 300  | 301  | 303  | 304  | 304  | 304  | 303  | 302  | 302  | 301  | 301  | 300  | 299  | 0.3% |
| Midsized Cars                        | 290  | 297  | 297  | 299  | 306  | 305  | 306  | 309  | 311  | 314  | 316  | 317  | 319  | 320  | 320  | 319  | 319  | 319  | 319  | 319  | 318  | 318  | 0.4% |
| Large Cars                           | 323  | 327  | 327  | 331  | 340  | 340  | 342  | 345  | 348  | 351  | 355  | 359  | 364  | 365  | 366  | 366  | 366  | 367  | 367  | 368  | 368  | 369  | 0.6% |
| 2-Seater Cars                        | 280  | 285  | 287  | 291  | 300  | 301  | 305  | 309  | 313  | 316  | 320  | 322  | 325  | 327  | 328  | 329  | 329  | 330  | 331  | 331  | 332  | 333  | 0.8% |
| Small Pickup                         | 259  | 265  | 264  | 265  | 267  | 266  | 266  | 266  | 267  | 267  | 267  | 268  | 269  | 270  | 272  | 272  | 273  | 274  | 274  | 275  | 276  | 275  | 0.3% |
| Large Pickup                         | 253  | 255  | 254  | 255  | 256  | 255  | 256  | 258  | 260  | 260  | 261  | 264  | 266  | 269  | 270  | 272  | 274  | 276  | 278  | 280  | 283  | 282  | 0.5% |
| Small Van                            | 275  | 281  | 281  | 282  | 286  | 285  | 285  | 286  | 289  | 288  | 289  | 291  | 292  | 294  | 296  | 297  | 298  | 299  | 300  | 301  | 302  | 301  | 0.4% |
| Large Van                            | 275  | 281  | 282  | 286  | 291  | 291  | 293  | 298  | 301  | 302  | 304  | 307  | 311  | 314  | 316  | 319  | 321  | 323  | 326  | 329  | 332  | 332  | 0.9% |
| Small Utility                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A  |
| Large Utility                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A  |
| <b>Methanol Flex</b>                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Minicompact Cars                     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A  |
| Subcompact Cars                      | 264  | 269  | 270  | 271  | 276  | 276  | 276  | 277  | 278  | 279  | 281  | 282  | 283  | 283  | 283  | 282  | 281  | 280  | 280  | 279  | 279  | 278  | 0.2% |
| Compact Cars                         | 253  | 258  | 258  | 260  | 267  | 266  | 267  | 268  | 270  | 272  | 273  | 274  | 275  | 275  | 274  | 273  | 273  | 273  | 272  | 272  | 271  | 271  | 0.3% |
| Midsized Cars                        | 263  | 268  | 269  | 271  | 276  | 276  | 277  | 279  | 282  | 284  | 285  | 287  | 289  | 289  | 289  | 288  | 288  | 288  | 288  | 288  | 288  | 288  | 0.4% |
| Large Cars                           | 292  | 296  | 296  | 299  | 308  | 308  | 309  | 312  | 315  | 318  | 321  | 325  | 329  | 330  | 331  | 331  | 332  | 332  | 332  | 333  | 333  | 334  | 0.6% |
| 2-Seater Cars                        | 253  | 258  | 260  | 263  | 272  | 273  | 276  | 279  | 283  | 286  | 289  | 292  | 294  | 296  | 297  | 297  | 298  | 299  | 299  | 300  | 300  | 301  | 0.8% |
| Small Pickup                         | 234  | 239  | 239  | 240  | 242  | 241  | 240  | 241  | 242  | 241  | 242  | 243  | 244  | 245  | 246  | 246  | 247  | 248  | 248  | 249  | 249  | 249  | 0.3% |
| Large Pickup                         | 229  | 231  | 230  | 230  | 232  | 231  | 232  | 234  | 235  | 235  | 236  | 239  | 241  | 243  | 245  | 246  | 248  | 250  | 252  | 254  | 256  | 255  | 0.5% |
| Small Van                            | 249  | 255  | 254  | 255  | 259  | 258  | 259  | 261  | 261  | 262  | 263  | 265  | 266  | 268  | 269  | 270  | 271  | 272  | 272  | 273  | 273  | 273  | 0.4% |
| Large Van                            | 248  | 254  | 256  | 259  | 263  | 263  | 265  | 269  | 273  | 273  | 275  | 278  | 281  | 284  | 286  | 288  | 290  | 292  | 295  | 298  | 300  | 300  | 0.9% |
| Small Utility                        | 231  | 237  | 237  | 238  | 242  | 241  | 241  | 243  | 245  | 245  | 246  | 247  | 249  | 251  | 252  | 254  | 255  | 255  | 256  | 257  | 258  | 258  | 0.5% |
| Large Utility                        | 269  | 275  | 276  | 279  | 283  | 283  | 285  | 289  | 293  | 293  | 296  | 300  | 303  | 305  | 307  | 309  | 311  | 313  | 316  | 318  | 320  | 320  | 0.8% |



**Table 59. New Light-Duty Vehicle Range (3 of 4)  
(Miles)**

|                                      | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-<br>2020 |      |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|------|
| <b>Liquefied Petroleum Gas (LPG)</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |      |
| Minicompact Cars                     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Subcompact Cars                      | 394  | 401  | 402  | 404  | 411  | 411  | 411  | 413  | 414  | 416  | 419  | 420  | 422  | 422  | 422  | 420  | 419  | 418  | 417  | 417  | 416  | 414  | 414           | 0.2% |
| Compact Cars                         | 377  | 385  | 385  | 387  | 398  | 397  | 398  | 400  | 402  | 405  | 407  | 408  | 410  | 411  | 410  | 409  | 408  | 407  | 407  | 406  | 405  | 404  | 404           | 0.3% |
| Midsized Cars                        | 392  | 400  | 401  | 403  | 412  | 412  | 413  | 417  | 420  | 423  | 426  | 428  | 431  | 431  | 431  | 431  | 430  | 430  | 430  | 430  | 430  | 429  | 429           | 0.4% |
| Large Cars                           | 435  | 441  | 441  | 446  | 459  | 459  | 461  | 465  | 469  | 474  | 478  | 484  | 491  | 492  | 494  | 494  | 494  | 495  | 496  | 496  | 497  | 497  | 497           | 0.6% |
| 2-Seater Cars                        | 378  | 384  | 387  | 393  | 405  | 406  | 411  | 417  | 422  | 427  | 431  | 435  | 439  | 441  | 442  | 443  | 445  | 445  | 446  | 447  | 448  | 449  | 449           | 0.8% |
| Small Pickup                         | 349  | 357  | 356  | 357  | 361  | 359  | 358  | 359  | 361  | 360  | 360  | 362  | 363  | 365  | 366  | 368  | 369  | 369  | 370  | 371  | 372  | 371  | 371           | 0.3% |
| Large Pickup                         | 341  | 344  | 343  | 344  | 346  | 344  | 345  | 348  | 351  | 350  | 352  | 356  | 359  | 362  | 365  | 367  | 370  | 372  | 375  | 378  | 381  | 381  | 381           | 0.5% |
| Small Van                            | 371  | 380  | 379  | 381  | 386  | 385  | 385  | 386  | 389  | 389  | 390  | 392  | 395  | 397  | 399  | 401  | 402  | 404  | 405  | 406  | 407  | 406  | 406           | 0.4% |
| Large Van                            | 370  | 379  | 381  | 386  | 393  | 392  | 396  | 401  | 407  | 407  | 410  | 415  | 419  | 423  | 427  | 430  | 433  | 436  | 440  | 444  | 448  | 448  | 448           | 0.9% |
| Small Utility                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Large Utility                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| <b>LPG Bi-Fuel</b>                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |      |
| Minicompact Cars                     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Subcompact Cars                      | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Compact Cars                         | 355  | 362  | 363  | 364  | 374  | 374  | 374  | 376  | 379  | 381  | 383  | 384  | 386  | 386  | 386  | 385  | 384  | 383  | 383  | 382  | 381  | 380  | 380           | 0.3% |
| Midsized Cars                        | 369  | 377  | 377  | 380  | 388  | 388  | 389  | 392  | 395  | 398  | 401  | 403  | 405  | 406  | 406  | 405  | 405  | 405  | 405  | 404  | 404  | 404  | 404           | 0.4% |
| Large Cars                           | 410  | 415  | 415  | 420  | 432  | 432  | 434  | 438  | 442  | 446  | 450  | 455  | 462  | 463  | 465  | 465  | 465  | 466  | 467  | 467  | 468  | 468  | 468           | 0.6% |
| 2-Seater Cars                        | 355  | 361  | 364  | 370  | 381  | 382  | 387  | 392  | 397  | 402  | 406  | 409  | 413  | 415  | 416  | 417  | 418  | 419  | 420  | 421  | 422  | 422  | 422           | 0.8% |
| Small Pickup                         | 329  | 336  | 335  | 336  | 339  | 338  | 337  | 338  | 339  | 339  | 339  | 340  | 342  | 343  | 345  | 346  | 347  | 348  | 348  | 349  | 350  | 349  | 349           | 0.3% |
| Large Pickup                         | 321  | 324  | 323  | 323  | 325  | 324  | 325  | 328  | 330  | 330  | 332  | 335  | 338  | 341  | 343  | 346  | 348  | 350  | 353  | 356  | 359  | 358  | 358           | 0.5% |
| Small Van                            | 350  | 357  | 357  | 358  | 363  | 362  | 362  | 364  | 366  | 366  | 367  | 369  | 371  | 374  | 376  | 377  | 379  | 380  | 381  | 382  | 383  | 383  | 383           | 0.4% |
| Large Van                            | 349  | 356  | 359  | 364  | 370  | 369  | 372  | 378  | 383  | 383  | 386  | 390  | 394  | 398  | 402  | 405  | 407  | 410  | 414  | 418  | 422  | 422  | 422           | 0.9% |
| Small Utility                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Large Utility                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| <b>Electric</b>                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |      |
| Minicompact Cars                     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Subcompact Cars                      | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80            | N/A  |
| Compact Cars                         | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80            | N/A  |
| Midsized Cars                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Large Cars                           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| 2-Seater Cars                        | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80            | N/A  |
| Small Pickup                         | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80            | N/A  |
| Large Pickup                         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Small Van                            | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80   | 80            | N/A  |
| Large Van                            | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Small Utility                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Large Utility                        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| <b>Diesel-Electric Hybrid</b>        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |      |
| Minicompact Cars                     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Subcompact Cars                      | 603  | 614  | 615  | 618  | 629  | 629  | 629  | 631  | 634  | 637  | 640  | 642  | 645  | 646  | 645  | 642  | 640  | 639  | 638  | 637  | 636  | 634  | 634           | 0.2% |
| Compact Cars                         | 576  | 589  | 589  | 592  | 608  | 608  | 608  | 612  | 615  | 619  | 622  | 624  | 628  | 628  | 627  | 625  | 624  | 623  | 622  | 621  | 619  | 618  | 618           | 0.3% |
| Midsized Cars                        | 599  | 612  | 613  | 617  | 631  | 630  | 632  | 637  | 642  | 647  | 651  | 654  | 659  | 659  | 659  | 659  | 658  | 658  | 657  | 657  | 657  | 656  | 656           | 0.4% |
| Large Cars                           | 666  | 674  | 675  | 683  | 702  | 702  | 705  | 711  | 718  | 725  | 732  | 740  | 750  | 753  | 755  | 756  | 756  | 757  | 758  | 759  | 760  | 761  | 761           | 0.6% |
| 2-Seater Cars                        | 578  | 587  | 592  | 601  | 620  | 622  | 629  | 637  | 645  | 653  | 660  | 665  | 672  | 674  | 676  | 678  | 680  | 681  | 683  | 684  | 685  | 686  | 686           | 0.8% |
| Small Pickup                         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Large Pickup                         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Small Van                            | 568  | 581  | 580  | 582  | 590  | 589  | 588  | 591  | 595  | 595  | 597  | 600  | 604  | 607  | 610  | 613  | 615  | 617  | 619  | 621  | 623  | 622  | 622           | 0.4% |
| Large Van                            | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0             | N/A  |
| Small Utility                        | 527  | 540  | 540  | 544  | 551  | 550  | 550  | 553  | 558  | 558  | 560  | 564  | 568  | 572  | 575  | 578  | 581  | 583  | 585  | 587  | 589  | 589  | 589           | 0.5% |
| Large Utility                        | 614  | 627  | 629  | 636  | 645  | 645  | 650  | 659  | 668  | 669  | 675  | 683  | 691  | 697  | 701  | 706  | 710  | 715  | 720  | 725  | 731  | 730  | 730           | 0.8% |

**Table 59. New Light-Duty Vehicle Range (4 of 4)  
(Miles)**

|                           | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-<br>2020 |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| <b>Fuel Cell Methanol</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |
| Minicompact Cars          | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Subcompact Cars           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Compact Cars              | 443  | 453  | 453  | 456  | 468  | 467  | 468  | 470  | 473  | 476  | 478  | 480  | 483  | 483  | 482  | 481  | 480  | 479  | 478  | 478  | 476  | 475  | 0.3%          |
| Midsized Cars             | 461  | 471  | 471  | 475  | 485  | 485  | 486  | 490  | 494  | 498  | 501  | 503  | 507  | 507  | 507  | 507  | 506  | 506  | 506  | 506  | 505  | 505  | 0.4%          |
| Large Cars                | 512  | 519  | 519  | 525  | 540  | 540  | 542  | 547  | 552  | 558  | 563  | 569  | 577  | 579  | 581  | 582  | 582  | 582  | 583  | 584  | 585  | 585  | 0.6%          |
| 2-Seater Cars             | 444  | 452  | 456  | 462  | 477  | 478  | 484  | 490  | 497  | 502  | 507  | 512  | 517  | 518  | 520  | 522  | 523  | 524  | 525  | 526  | 527  | 528  | 0.8%          |
| Small Pickup              | 411  | 420  | 419  | 420  | 424  | 423  | 421  | 422  | 424  | 423  | 424  | 425  | 427  | 429  | 431  | 432  | 434  | 434  | 436  | 437  | 438  | 437  | 0.3%          |
| Large Pickup              | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Small Van                 | 437  | 447  | 446  | 448  | 454  | 453  | 452  | 455  | 458  | 457  | 459  | 461  | 464  | 467  | 470  | 472  | 473  | 475  | 476  | 478  | 479  | 478  | 0.4%          |
| Large Van                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Small Utility             | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Large Utility             | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| <b>Fuel Cell Hydrogen</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |
| Minicompact Cars          | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Subcompact Cars           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Compact Cars              | 443  | 453  | 453  | 456  | 468  | 467  | 468  | 470  | 473  | 476  | 478  | 480  | 483  | 483  | 482  | 481  | 480  | 479  | 478  | 478  | 476  | 475  | 0.3%          |
| Midsized Cars             | 461  | 471  | 471  | 475  | 485  | 485  | 486  | 490  | 494  | 498  | 501  | 503  | 507  | 507  | 507  | 507  | 506  | 506  | 506  | 506  | 505  | 505  | 0.4%          |
| Large Cars                | 512  | 519  | 519  | 525  | 540  | 540  | 542  | 547  | 552  | 558  | 563  | 569  | 577  | 579  | 581  | 582  | 582  | 582  | 583  | 584  | 585  | 585  | 0.6%          |
| 2-Seater Cars             | 444  | 452  | 456  | 462  | 477  | 478  | 484  | 490  | 497  | 502  | 507  | 512  | 517  | 518  | 520  | 522  | 523  | 524  | 525  | 526  | 527  | 528  | 0.8%          |
| Small Pickup              | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Large Pickup              | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Small Van                 | 437  | 447  | 446  | 448  | 454  | 453  | 452  | 455  | 458  | 457  | 459  | 461  | 464  | 467  | 470  | 472  | 473  | 475  | 476  | 478  | 479  | 478  | 0.4%          |
| Large Van                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Small Utility             | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Large Utility             | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| <b>Fuel Cell Gasoline</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |
| Minicompact Cars          | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Subcompact Cars           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Compact Cars              | 443  | 453  | 453  | 456  | 468  | 467  | 468  | 470  | 473  | 476  | 478  | 480  | 483  | 483  | 482  | 481  | 480  | 479  | 478  | 478  | 476  | 475  | 0.3%          |
| Midsized Cars             | 461  | 471  | 471  | 475  | 485  | 485  | 486  | 490  | 494  | 498  | 501  | 503  | 507  | 507  | 507  | 507  | 506  | 506  | 506  | 506  | 505  | 505  | 0.4%          |
| Large Cars                | 512  | 519  | 519  | 525  | 540  | 540  | 542  | 547  | 552  | 558  | 563  | 569  | 577  | 579  | 581  | 582  | 582  | 582  | 583  | 584  | 585  | 585  | 0.6%          |
| 2-Seater Cars             | 444  | 452  | 456  | 462  | 477  | 478  | 484  | 490  | 497  | 502  | 507  | 512  | 517  | 518  | 520  | 522  | 523  | 524  | 525  | 526  | 527  | 528  | 0.8%          |
| Small Pickup              | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Large Pickup              | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Small Van                 | 437  | 447  | 446  | 448  | 454  | 453  | 452  | 455  | 458  | 457  | 459  | 461  | 464  | 467  | 470  | 472  | 473  | 475  | 476  | 478  | 479  | 478  | 0.4%          |
| Large Van                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Small Utility             | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |
| Large Utility             | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | N/A           |

N/A = Not applicable.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy and Environmental Analysis Inc., Updates to the Fuels Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); and and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projection: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 60. Electric Power Projections for EMM Region (1 of 3)  
01 - East Central Area Reliability Coordination Agreement**

|   | 1998          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 1998-2020   |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| <b>Electricity Generating Capacity 1/<br/>(gigawatts)</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam  | 83.61         | 83.61         | 83.61         | 83.61         | 82.87         | 82.06         | 81.50         | 81.28         | 80.39         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | -0.2%       |
| Other Fossil Steam 2/                                     | 3.56          | 3.56          | 3.70          | 3.70          | 3.70          | 3.70          | 3.70          | 3.70          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 0.0%        |
| Combined Cycle  | 0.34          | 0.34          | 1.39          | 1.39          | 1.39          | 1.39          | 1.39          | 1.39          | 1.53          | 1.53          | 2.67          | 3.42          | 3.80          | 4.16          | 4.37          | 4.64          | 5.10          | 5.86          | 6.91          | 7.90          | 9.42          | 10.22         | 16.8%       |
| Combustion Turbine/Diesel                                 | 9.05          | 9.63          | 10.11         | 11.87         | 14.09         | 14.44         | 17.63         | 18.24         | 20.89         | 23.04         | 25.09         | 25.83         | 27.75         | 27.96         | 28.63         | 29.05         | 29.56         | 30.80         | 32.38         | 34.33         | 35.04         | 36.36         | 6.5%        |
| Nuclear Power   | 7.59          | 7.65          | 7.65          | 7.65          | 7.65          | 7.65          | 7.65          | 7.65          | 6.89          | 6.89          | 6.89          | 6.89          | 6.89          | 6.89          | 6.89          | 5.89          | 4.79          | 2.81          | 0.82          | 0.82          | 0.82          | 0.82          | -9.6%       |
| Pumped Storage/Other 3/                                   | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | N/A         |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable 4/  | 1.56          | 1.57          | 1.60          | 1.60          | 1.65          | 1.65          | 1.66          | 1.66          | 1.67          | 1.67          | 1.68          | 1.68          | 1.69          | 1.69          | 1.69          | 1.69          | 1.70          | 1.70          | 1.70          | 1.70          | 1.70          | 1.70          | 0.4%        |
| <b>Total Capability</b>                                   | <b>108.99</b> | <b>109.64</b> | <b>111.34</b> | <b>113.10</b> | <b>114.63</b> | <b>114.18</b> | <b>116.80</b> | <b>117.20</b> | <b>118.18</b> | <b>119.82</b> | <b>123.00</b> | <b>124.51</b> | <b>126.81</b> | <b>127.38</b> | <b>128.26</b> | <b>127.95</b> | <b>127.82</b> | <b>127.85</b> | <b>128.49</b> | <b>131.43</b> | <b>133.67</b> | <b>135.79</b> | <b>1.0%</b> |
| <b>Cumulative Planned Additions 5/</b>                    |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Other Fossil Steam 2/                                     | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Combined Cycle  | 0.00          | 0.00          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | 1.05          | N/A         |
| Combustion Turbine/Diesel                                 | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Nuclear Power   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Pumped Storage/Other 3/                                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable 4/  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| <b>Total (planned)</b>                                    | <b>0.00</b>   | <b>0.00</b>   | <b>1.05</b>   | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>                  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Other Fossil Steam 2/                                     | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Combined Cycle  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.15          | 0.15          | 1.28          | 2.03          | 2.41          | 2.77          | 2.98          | 3.25          | 3.71          | 4.48          | 5.53          | 6.51          | 8.03          | 8.84          | N/A         |
| Combustion Turbine/Diesel                                 | 0.00          | 0.58          | 1.06          | 2.92          | 5.54          | 5.90          | 9.16          | 9.78          | 12.45         | 14.60         | 16.65         | 17.40         | 19.32         | 19.52         | 20.20         | 20.61         | 21.13         | 22.36         | 23.94         | 25.90         | 26.61         | 27.92         | N/A         |
| Nuclear Power   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Pumped Storage/Other 3/                                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable 4/  | 0.00          | 0.00          | 0.03          | 0.03          | 0.04          | 0.04          | 0.04          | 0.05          | 0.05          | 0.06          | 0.06          | 0.07          | 0.07          | 0.07          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.09          | 0.09          | 0.09          | N/A         |
| <b>Total (unplanned)</b>                                  | <b>0.00</b>   | <b>0.58</b>   | <b>1.09</b>   | <b>2.95</b>   | <b>5.57</b>   | <b>5.93</b>   | <b>9.21</b>   | <b>9.83</b>   | <b>12.65</b>  | <b>14.81</b>  | <b>17.99</b>  | <b>19.50</b>  | <b>21.80</b>  | <b>22.37</b>  | <b>23.25</b>  | <b>23.94</b>  | <b>24.91</b>  | <b>26.92</b>  | <b>29.55</b>  | <b>32.49</b>  | <b>34.73</b>  | <b>36.85</b>  | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                         | <b>0.00</b>   | <b>0.58</b>   | <b>2.14</b>   | <b>4.00</b>   | <b>6.62</b>   | <b>6.98</b>   | <b>10.26</b>  | <b>10.87</b>  | <b>13.70</b>  | <b>15.86</b>  | <b>19.04</b>  | <b>20.55</b>  | <b>22.85</b>  | <b>23.42</b>  | <b>24.30</b>  | <b>24.99</b>  | <b>25.96</b>  | <b>27.97</b>  | <b>30.60</b>  | <b>33.54</b>  | <b>35.78</b>  | <b>37.90</b>  | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                             | <b>0.00</b>   | <b>0.00</b>   | <b>0.00</b>   | <b>0.10</b>   | <b>1.73</b>   | <b>3.04</b>   | <b>3.68</b>   | <b>3.91</b>   | <b>5.76</b>   | <b>6.27</b>   | <b>6.27</b>   | <b>6.27</b>   | <b>6.27</b>   | <b>6.27</b>   | <b>6.27</b>   | <b>7.27</b>   | <b>8.37</b>   | <b>10.35</b>  | <b>12.34</b>  | <b>12.34</b>  | <b>12.34</b>  | <b>12.34</b>  | <b>N/A</b>  |
| <b>Cogenerators 6/<br/>Capacity</b>                       |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal  | 1.61          | 1.81          | 1.81          | 1.81          | 1.82          | 1.82          | 1.82          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 1.81          | 0.5%        |
| Petroleum   | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.1%        |
| Natural Gas   | 2.44          | 3.19          | 3.35          | 3.36          | 3.37          | 3.37          | 3.38          | 3.39          | 3.39          | 3.40          | 3.41          | 3.42          | 3.43          | 3.43          | 3.44          | 3.45          | 3.47          | 3.48          | 3.49          | 3.50          | 3.51          | 3.52          | 1.7%        |
| Other Gaseous Fuels                                       | 0.02          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 0.04          | 3.7%        |
| Renewables  | 0.42          | 0.42          | 0.43          | 0.43          | 0.44          | 0.44          | 0.45          | 0.46          | 0.46          | 0.47          | 0.47          | 0.48          | 0.48          | 0.48          | 0.49          | 0.49          | 0.50          | 0.50          | 0.51          | 0.51          | 0.52          | 0.52          | 1.0%        |
| Other   | 0.02          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.03          | 0.04          | 3.0%        |
| <b>Total</b>  | <b>4.54</b>   | <b>5.52</b>   | <b>5.69</b>   | <b>5.71</b>   | <b>5.72</b>   | <b>5.73</b>   | <b>5.75</b>   | <b>5.76</b>   | <b>5.77</b>   | <b>5.79</b>   | <b>5.80</b>   | <b>5.81</b>   | <b>5.82</b>   | <b>5.84</b>   | <b>5.85</b>   | <b>5.87</b>   | <b>5.89</b>   | <b>5.91</b>   | <b>5.92</b>   | <b>5.94</b>   | <b>5.96</b>   | <b>5.97</b>   | <b>1.3%</b> |

**Table 60. Electric Power Projections for EMM Region (2 of 3)**  
**01 - East Central Area Reliability Coordination Agreement**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b>                   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| (billion kilowatthours)                     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential                                 | 154.75 | 165.14 | 167.96 | 170.72 | 173.47 | 176.05 | 178.88 | 181.36 | 183.95 | 186.50 | 189.66 | 192.12 | 194.23 | 196.36 | 198.43 | 200.56 | 202.44 | 204.63 | 206.39 | 208.34 | 210.67 | 212.94 | 1.5%      |
| Commercial/Other                            | 136.20 | 143.99 | 146.28 | 148.52 | 150.68 | 152.80 | 155.36 | 157.41 | 159.56 | 161.82 | 164.49 | 166.32 | 168.65 | 170.61 | 172.08 | 173.34 | 173.91 | 174.97 | 175.47 | 175.96 | 176.62 | 177.01 | 1.2%      |
| Industrial                                  | 202.80 | 206.61 | 206.71 | 210.37 | 215.44 | 219.39 | 223.70 | 226.35 | 229.34 | 231.86 | 233.48 | 235.83 | 237.72 | 240.72 | 244.32 | 248.07 | 251.50 | 253.54 | 256.12 | 258.84 | 262.16 | 265.62 | 1.2%      |
| Transportation                              | 2.69   | 2.83   | 2.89   | 2.95   | 3.27   | 3.57   | 3.84   | 4.09   | 4.30   | 4.51   | 4.73   | 4.94   | 5.14   | 5.34   | 5.53   | 5.72   | 5.80   | 5.75   | 5.68   | 5.60   | 5.51   | 5.40   | 3.2%      |
| Total Sales                                 | 496.43 | 518.58 | 523.84 | 532.57 | 542.85 | 551.81 | 561.78 | 569.20 | 577.15 | 584.70 | 592.35 | 599.22 | 605.75 | 613.03 | 620.36 | 627.69 | 633.65 | 638.89 | 643.66 | 648.73 | 654.94 | 660.97 | 1.3%      |
| <b>Net Energy for Load (billion kwh) 7/</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                 | 2.03   | 3.41   | 2.98   | 9.96   | 11.32  | 11.64  | 11.33  | 12.60  | 10.42  | 4.72   | 2.78   | 0.25   | 0.38   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Gross International Exports                 | 3.56   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | -18.2%    |
| Gross Interregional Elec. Imports           | 21.07  | 13.60  | 11.71  | 10.76  | 9.10   | 9.10   | 9.09   | 9.09   | 9.10   | 8.38   | 7.70   | 6.96   | 6.18   | 5.46   | 4.88   | 4.02   | 3.31   | 2.58   | 1.98   | 1.13   | 0.39   | 0.02   | -27.4%    |
| Gross Interregional Elec. Exports           | 42.49  | 40.90  | 42.92  | 49.01  | 51.75  | 47.79  | 49.06  | 47.29  | 48.51  | 47.20  | 47.33  | 45.85  | 48.36  | 47.18  | 46.93  | 48.50  | 49.05  | 50.05  | 47.54  | 45.28  | 47.28  | 47.73  | 0.5%      |
| Purchases from cogenerators 6/              | 14.50  | 14.15  | 14.12  | 14.17  | 14.22  | 14.27  | 14.36  | 14.45  | 14.53  | 14.63  | 14.72  | 14.81  | 14.90  | 15.00  | 15.09  | 15.19  | 15.29  | 15.39  | 15.48  | 15.58  | 15.67  | 15.76  | 0.4%      |
| Util. Generation for Customers              | 530.29 | 561.12 | 571.00 | 579.31 | 592.69 | 597.50 | 609.21 | 613.50 | 624.77 | 637.40 | 647.76 | 656.37 | 665.87 | 672.98 | 680.53 | 690.12 | 697.15 | 704.30 | 707.36 | 711.23 | 720.39 | 727.47 | 1.4%      |
| Total Net Energy for Load                   | 521.83 | 551.34 | 556.84 | 565.15 | 575.54 | 584.68 | 594.89 | 602.31 | 610.27 | 617.89 | 625.58 | 632.49 | 638.92 | 646.21 | 653.53 | 660.79 | 666.66 | 672.17 | 677.23 | 682.62 | 689.13 | 695.47 | 1.3%      |
| <b>Generation by Fuel Type</b>              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| (billion kilowatthours)                     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 487.09 | 481.43 | 494.89 | 502.60 | 514.69 | 525.27 | 529.78 | 532.57 | 537.46 | 543.75 | 546.90 | 546.19 | 548.04 | 551.01 | 554.40 | 557.77 | 564.61 | 565.31 | 569.48 | 572.00 | 572.90 | 573.79 | 0.7%      |
| Petroleum                                   | 2.55   | 0.85   | 0.58   | 0.60   | 0.41   | 0.51   | 0.52   | 0.41   | 0.36   | 0.36   | 0.35   | 0.35   | 0.35   | 0.35   | 0.36   | 0.37   | 0.52   | 0.53   | 0.63   | 0.64   | 0.63   | 0.64   | -6.1%     |
| Natural Gas                                 | 4.06   | 22.16  | 17.86  | 18.89  | 19.90  | 14.49  | 21.45  | 22.31  | 31.45  | 39.33  | 46.22  | 54.97  | 62.62  | 66.71  | 70.96  | 77.23  | 90.85  | 98.49  | 114.90 | 127.88 | 136.14 | 142.32 | 17.6%     |
| Nuclear                                     | 33.46  | 51.91  | 52.15  | 52.36  | 52.57  | 52.78  | 52.99  | 53.16  | 49.93  | 48.33  | 48.60  | 48.74  | 48.93  | 49.15  | 49.22  | 49.29  | 36.43  | 35.24  | 17.74  | 6.09   | 6.09   | 6.09   | -7.5%     |
| Pumped Storage/Other 3/                     | -1.34  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -19.8%    |
| Renewable 4/                                | 5.01   | 5.32   | 6.07   | 5.40   | 5.66   | 5.01   | 5.03   | 5.61   | 6.12   | 6.19   | 6.23   | 6.68   | 6.49   | 6.31   | 6.15   | 6.01   | 5.30   | 5.27   | 5.17   | 5.17   | 5.18   | 5.18   | 0.2%      |
| Total Generation                            | 530.83 | 561.66 | 571.55 | 579.85 | 593.23 | 598.05 | 609.75 | 614.05 | 625.31 | 637.95 | 648.30 | 656.92 | 666.41 | 673.52 | 681.07 | 690.66 | 697.69 | 704.84 | 707.90 | 711.78 | 720.93 | 728.01 | 1.4%      |
| Sales to Customers                          | 530.29 | 561.12 | 571.00 | 579.31 | 592.69 | 597.50 | 609.21 | 613.50 | 624.77 | 637.40 | 647.76 | 656.37 | 665.87 | 672.98 | 680.53 | 690.12 | 697.15 | 704.30 | 707.36 | 711.23 | 720.39 | 727.47 | 1.4%      |
| Generation for Own Use                      | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.54   | 0.1%      |
| <b>Cogenerators</b>                         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 10.14  | 9.55   | 9.55   | 9.55   | 9.55   | 9.55   | 9.55   | 9.54   | 9.54   | 9.54   | 9.53   | 9.53   | 9.52   | 9.52   | 9.52   | 9.52   | 9.51   | 9.51   | 9.50   | 9.50   | 9.50   | 9.50   | -0.3%     |
| Petroleum                                   | 0.31   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.36   | 0.36   | 0.36   | 0.36   | 0.36   | 0.37   | 0.37   | 0.37   | 0.38   | 0.38   | 0.38   | 0.38   | 0.9%      |
| Natural Gas                                 | 15.18  | 15.11  | 15.14  | 15.18  | 15.21  | 15.24  | 15.28  | 15.31  | 15.35  | 15.40  | 15.43  | 15.48  | 15.54  | 15.59  | 15.64  | 15.70  | 15.77  | 15.84  | 15.92  | 15.98  | 16.04  | 16.09  | 0.3%      |
| Other Gaseous Fuels                         | 0.27   | 0.50   | 0.50   | 0.50   | 0.51   | 0.51   | 0.52   | 0.52   | 0.52   | 0.54   | 0.54   | 0.55   | 0.56   | 0.56   | 0.57   | 0.59   | 0.59   | 0.60   | 0.62   | 0.63   | 0.63   | 0.64   | 4.0%      |
| Renewable                                   | 1.45   | 2.21   | 2.24   | 2.27   | 2.30   | 2.33   | 2.36   | 2.38   | 2.41   | 2.43   | 2.45   | 2.47   | 2.48   | 2.50   | 2.52   | 2.54   | 2.57   | 2.58   | 2.60   | 2.62   | 2.63   | 2.65   | 2.8%      |
| Other                                       | 0.92   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.98   | 0.98   | 0.98   | 0.98   | 0.98   | 0.99   | 0.99   | 0.99   | 0.99   | 1.00   | 1.00   | 1.00   | 1.00   | 0.4%      |
| Total                                       | 28.28  | 28.69  | 28.76  | 28.82  | 28.89  | 28.95  | 29.03  | 29.09  | 29.14  | 29.23  | 29.28  | 29.36  | 29.44  | 29.51  | 29.59  | 29.71  | 29.81  | 29.90  | 30.01  | 30.10  | 30.19  | 30.27  | 0.3%      |
| Sales to Utilities                          | 14.50  | 14.15  | 14.12  | 14.17  | 14.22  | 14.27  | 14.36  | 14.45  | 14.53  | 14.63  | 14.72  | 14.81  | 14.90  | 15.00  | 15.09  | 15.19  | 15.29  | 15.39  | 15.48  | 15.58  | 15.67  | 15.76  | 0.4%      |
| Generation for Own Use                      | 13.79  | 14.55  | 14.64  | 14.65  | 14.67  | 14.68  | 14.67  | 14.64  | 14.61  | 14.61  | 14.57  | 14.55  | 14.54  | 14.52  | 14.50  | 14.51  | 14.52  | 14.51  | 14.53  | 14.52  | 14.52  | 14.51  | 0.2%      |
| <b>End-Use Prices</b>                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| (1998 cents per kilowatthour)               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential                                 | 7.4    | 7.2    | 7.1    | 7.0    | 6.9    | 6.9    | 6.7    | 6.7    | 6.7    | 6.6    | 6.5    | 6.5    | 6.4    | 6.3    | 6.3    | 6.3    | 6.5    | 6.4    | 6.4    | 6.4    | 6.3    | 6.2    | -0.8%     |
| Commercial                                  | 7.0    | 6.8    | 6.7    | 6.5    | 6.4    | 6.3    | 6.2    | 6.1    | 6.1    | 6.1    | 5.9    | 5.9    | 5.8    | 5.7    | 5.7    | 5.7    | 5.8    | 5.8    | 5.8    | 5.8    | 5.7    | 5.6    | -1.0%     |
| Industrial                                  | 4.1    | 4.2    | 4.1    | 4.0    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.8    | 3.8    | 3.8    | 3.7    | 3.7    | 3.8    | 3.9    | 3.8    | 3.8    | 3.8    | 3.8    | 3.7    | -0.4%     |
| Transportation                              | 5.1    | 4.9    | 4.8    | 4.7    | 4.6    | 4.5    | 4.4    | 4.3    | 4.3    | 4.2    | 4.1    | 4.1    | 4.1    | 4.0    | 4.0    | 4.0    | 4.0    | 3.9    | 3.9    | 3.9    | 3.8    | 3.8    | -1.3%     |
| All Sectors Average                         | 5.9    | 5.9    | 5.8    | 5.7    | 5.6    | 5.5    | 5.4    | 5.4    | 5.4    | 5.4    | 5.3    | 5.3    | 5.2    | 5.1    | 5.1    | 5.1    | 5.2    | 5.2    | 5.2    | 5.2    | 5.1    | 5.0    | -0.7%     |

**Table 60. Electric Power Projections for EMM Region (3 of 3)  
01 - East Central Area Reliability Coordination Agreement**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal                                  | 4.95   | 4.94   | 5.09   | 5.17   | 5.35   | 5.46   | 5.51   | 5.54   | 5.58   | 5.65   | 5.68   | 5.67   | 5.69   | 5.72   | 5.76   | 5.80   | 5.87   | 5.88   | 5.93   | 5.96   | 5.97   | 5.98   | 0.9%      |
| Natural Gas                           | 0.07   | 0.26   | 0.21   | 0.22   | 0.23   | 0.17   | 0.24   | 0.25   | 0.35   | 0.42   | 0.46   | 0.52   | 0.58   | 0.61   | 0.65   | 0.70   | 0.83   | 0.87   | 0.99   | 1.09   | 1.13   | 1.17   | 13.4%     |
| Oil                                   | 0.03   | 0.01   | 0.01   | 0.01   | 0.00   | 0.01   | 0.01   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | -6.6%     |
| Total                                 | 5.05   | 5.22   | 5.31   | 5.39   | 5.58   | 5.63   | 5.75   | 5.79   | 5.93   | 6.08   | 6.15   | 6.20   | 6.28   | 6.34   | 6.42   | 6.51   | 6.71   | 6.76   | 6.93   | 7.06   | 7.11   | 7.15   | 1.6%      |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Carbon Dioxide                        | 493.95 | 522.92 | 534.46 | 542.80 | 560.29 | 568.02 | 577.64 | 580.95 | 591.39 | 602.87 | 608.68 | 611.24 | 616.89 | 622.13 | 628.13 | 635.14 | 650.35 | 653.60 | 665.84 | 675.46 | 678.96 | 682.26 | 1.5%      |
| Sulfur Dioxide                        | 3.92   | 3.49   | 3.14   | 3.01   | 2.50   | 2.49   | 2.49   | 2.50   | 2.45   | 2.48   | 2.61   | 2.37   | 2.37   | 2.39   | 2.41   | 2.42   | 2.47   | 2.48   | 2.44   | 2.37   | 2.36   | 2.38   | -2.2%     |
| Nitrogen Oxide                        | 1.53   | 1.31   | 1.35   | 1.37   | 1.43   | 1.46   | 1.47   | 1.48   | 1.50   | 1.52   | 1.54   | 1.54   | 1.54   | 1.55   | 1.57   | 1.58   | 1.61   | 1.61   | 1.64   | 1.65   | 1.65   | 1.66   | 0.4%      |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatt-hour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 61. Electric Power Projections for EMM Region (1 of 3)**  
**02 - Electric Reliability Council of Texas**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 14.84        | 14.84        | 14.84        | 14.84        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.40        | 13.42        | 13.44        | 13.46        | 13.49        | -0.4%       |
| Other Fossil Steam 2/                                    | 29.52        | 29.32        | 29.27        | 29.20        | 28.28        | 27.05        | 26.89        | 26.21        | 24.88        | 24.78        | 24.72        | 24.72        | 24.62        | 24.62        | 24.52        | 24.43        | 24.13        | 23.29        | 22.52        | 21.12        | 20.43        | 19.38        | -1.9%       |
| Combined Cycle   | 1.53         | 3.61         | 3.63         | 3.91         | 4.07         | 4.07         | 5.40         | 5.40         | 6.44         | 6.44         | 8.00         | 8.00         | 9.40         | 10.00        | 10.87        | 11.18        | 11.50        | 12.77        | 13.77        | 14.94        | 15.91        | 16.66        | 11.5%       |
| Combustion Turbine/Diesel                                | 4.92         | 5.54         | 6.25         | 6.59         | 8.31         | 9.35         | 10.03        | 11.42        | 12.44        | 13.55        | 14.02        | 15.17        | 15.83        | 16.69        | 17.42        | 17.78        | 18.40        | 19.02        | 19.54        | 19.77        | 20.14        | 20.34        | 6.7%        |
| Nuclear Power  | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | 4.80         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.64         | 0.82         | 1.01         | 1.27         | 1.42         | 1.72         | 1.90         | 2.27         | 2.46         | 2.86         | 2.86         | 2.86         | 2.93         | 2.93         | 2.94         | 2.99         | 3.05         | 3.06         | 3.06         | 3.07         | 3.13         | 3.14         | 7.5%        |
| <b>Total Capability</b>                                  | <b>56.24</b> | <b>58.92</b> | <b>59.79</b> | <b>60.62</b> | <b>60.27</b> | <b>60.38</b> | <b>62.42</b> | <b>63.50</b> | <b>64.42</b> | <b>65.83</b> | <b>67.80</b> | <b>68.95</b> | <b>70.97</b> | <b>72.44</b> | <b>73.94</b> | <b>74.58</b> | <b>75.28</b> | <b>76.34</b> | <b>77.11</b> | <b>77.13</b> | <b>77.88</b> | <b>77.81</b> | <b>1.5%</b> |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | 2.04         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.15         | 0.28         | 0.55         | 0.69         | 0.99         | 1.17         | 1.54         | 1.73         | 2.13         | 2.13         | 2.13         | 2.19         | 2.19         | 2.19         | 2.24         | 2.30         | 2.30         | 2.30         | 2.30         | 2.37         | 2.37         | N/A         |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>2.19</b>  | <b>2.32</b>  | <b>2.59</b>  | <b>2.73</b>  | <b>3.03</b>  | <b>3.21</b>  | <b>3.58</b>  | <b>3.77</b>  | <b>4.17</b>  | <b>4.17</b>  | <b>4.17</b>  | <b>4.24</b>  | <b>4.24</b>  | <b>4.24</b>  | <b>4.28</b>  | <b>4.34</b>  | <b>4.34</b>  | <b>4.34</b>  | <b>4.34</b>  | <b>4.41</b>  | <b>4.41</b>  | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.02         | 0.04         | 0.06         | 0.09         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.04         | 0.06         | 0.39         | 0.54         | 0.54         | 1.88         | 1.88         | 2.91         | 2.91         | 4.47         | 4.47         | 5.87         | 6.48         | 7.34         | 7.66         | 7.97         | 9.24         | 10.24        | 11.41        | 12.39        | 13.13        | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.61         | 1.33         | 1.67         | 3.39         | 4.42         | 5.11         | 6.50         | 7.52         | 8.62         | 9.10         | 10.25        | 10.91        | 11.76        | 12.50        | 12.86        | 13.48        | 14.10        | 14.62        | 14.85        | 15.22        | 15.42        | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.08         | 0.08         | 0.08         | 0.09         | 0.09         | 0.10         | 0.10         | 0.10         | N/A         |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.66</b>  | <b>1.45</b>  | <b>2.11</b>  | <b>3.99</b>  | <b>5.03</b>  | <b>7.05</b>  | <b>8.44</b>  | <b>10.49</b> | <b>11.60</b> | <b>13.64</b> | <b>14.79</b> | <b>16.84</b> | <b>18.31</b> | <b>19.92</b> | <b>20.60</b> | <b>21.53</b> | <b>23.43</b> | <b>24.97</b> | <b>26.39</b> | <b>27.77</b> | <b>28.75</b> | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>2.85</b>  | <b>3.77</b>  | <b>4.70</b>  | <b>6.73</b>  | <b>8.06</b>  | <b>10.26</b> | <b>12.02</b> | <b>14.26</b> | <b>15.77</b> | <b>17.81</b> | <b>18.96</b> | <b>21.08</b> | <b>22.55</b> | <b>24.15</b> | <b>24.88</b> | <b>25.88</b> | <b>27.78</b> | <b>29.32</b> | <b>30.74</b> | <b>32.18</b> | <b>33.16</b> | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.20</b>  | <b>0.24</b>  | <b>0.35</b>  | <b>2.72</b>  | <b>3.95</b>  | <b>4.11</b>  | <b>4.79</b>  | <b>6.11</b>  | <b>6.21</b>  | <b>6.28</b>  | <b>6.28</b>  | <b>6.38</b>  | <b>6.38</b>  | <b>6.48</b>  | <b>6.57</b>  | <b>6.86</b>  | <b>7.70</b>  | <b>8.48</b>  | <b>9.88</b>  | <b>10.57</b> | <b>11.61</b> | <b>N/A</b>  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal   | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.0%        |
| Petroleum  | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.20         | 0.0%        |
| Natural Gas  | 7.39         | 7.89         | 7.94         | 8.00         | 8.04         | 8.08         | 8.13         | 8.17         | 8.22         | 8.28         | 8.33         | 8.39         | 8.45         | 8.51         | 8.57         | 8.65         | 8.74         | 8.82         | 8.92         | 9.00         | 9.07         | 9.15         | 1.0%        |
| Other Gaseous Fuels                                      | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 3.7%        |
| Renewables   | 0.08         | 0.08         | 0.08         | 0.08         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.11         | 0.11         | 0.11         | 0.11         | 0.11         | 1.6%        |
| Other  | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 3.0%        |
| <b>Total</b>   | <b>8.02</b>  | <b>8.54</b>  | <b>8.58</b>  | <b>8.64</b>  | <b>8.69</b>  | <b>8.73</b>  | <b>8.78</b>  | <b>8.83</b>  | <b>8.88</b>  | <b>8.94</b>  | <b>8.99</b>  | <b>9.05</b>  | <b>9.12</b>  | <b>9.18</b>  | <b>9.24</b>  | <b>9.32</b>  | <b>9.41</b>  | <b>9.50</b>  | <b>9.60</b>  | <b>9.68</b>  | <b>9.75</b>  | <b>9.83</b>  | <b>0.9%</b> |

**Table 61. Electric Power Projections for EMM Region (2 of 3)  
02 - Electric Reliability Council of Texas**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 88.76  | 93.27  | 95.31  | 97.15  | 98.75  | 100.45 | 102.41 | 104.11 | 105.77 | 107.83 | 110.20 | 112.18 | 114.13 | 116.09 | 118.13 | 119.95 | 121.73 | 123.46 | 125.15 | 126.83 | 128.69 | 130.40 | 1.8%      |
| Commercial/Other  | 77.02  | 79.73  | 81.61  | 83.18  | 84.24  | 85.35  | 86.99  | 88.25  | 89.41  | 90.94  | 92.73  | 94.05  | 95.76  | 97.25  | 98.57  | 99.45  | 100.12 | 100.75 | 101.21 | 101.45 | 101.78 | 101.80 | 1.3%      |
| Industrial  | 79.38  | 79.91  | 79.70  | 81.44  | 83.36  | 84.82  | 86.49  | 87.89  | 89.51  | 90.59  | 91.12  | 91.98  | 92.74  | 93.84  | 95.22  | 96.73  | 98.48  | 99.64  | 100.90 | 101.97 | 103.20 | 104.47 | 1.3%      |
| Transportation  | 1.14   | 1.18   | 1.21   | 1.25   | 1.38   | 1.51   | 1.64   | 1.75   | 1.85   | 1.95   | 2.05   | 2.15   | 2.25   | 2.35   | 2.45   | 2.55   | 2.60   | 2.59   | 2.58   | 2.56   | 2.54   | 2.51   | 3.7%      |
| Total Sales   | 246.30 | 254.09 | 257.84 | 263.02 | 267.73 | 272.12 | 277.52 | 281.99 | 286.55 | 291.31 | 296.09 | 300.37 | 304.88 | 309.53 | 314.38 | 318.67 | 322.92 | 326.45 | 329.83 | 332.81 | 336.21 | 339.19 | 1.5%      |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Gross International Exports                               | 0.00   | 0.30   | 0.33   | 0.36   | 0.39   | 0.42   | 0.45   | 0.49   | 0.53   | 0.57   | 0.62   | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   | 0.67   | 25.4%     |
| Gross Interregional Elec. Imports                         | 1.10   | 0.41   | 1.91   | 2.21   | 2.68   | 2.77   | 2.66   | 2.81   | 2.66   | 3.02   | 2.97   | 2.86   | 2.74   | 2.60   | 2.28   | 2.32   | 2.07   | 2.10   | 1.84   | 1.77   | 1.57   | 1.47   | 1.3%      |
| Gross Interregional Elec. Exports                         | 3.68   | 3.55   | 2.82   | 1.09   | 0.65   | 0.40   | 0.64   | 0.68   | 0.94   | 0.69   | 0.62   | 0.57   | 0.57   | 0.53   | 0.46   | 0.35   | 0.40   | 0.44   | 0.21   | 0.09   | 0.14   | 0.20   | -12.5%    |
| Purchases from cogenerators 6/                            | 18.31  | 19.30  | 19.34  | 19.57  | 19.77  | 19.98  | 20.21  | 20.44  | 20.67  | 20.93  | 21.18  | 21.44  | 21.72  | 22.02  | 22.32  | 22.64  | 22.94  | 23.25  | 23.56  | 23.82  | 24.08  | 24.26  | 1.3%      |
| Util. Generation for Customers                            | 239.52 | 253.12 | 254.66 | 257.78 | 261.53 | 265.47 | 271.13 | 275.37 | 280.17 | 284.21 | 288.80 | 292.96 | 297.38 | 301.83 | 306.65 | 310.47 | 314.72 | 318.08 | 321.32 | 324.12 | 327.66 | 330.76 | 1.5%      |
| Total Net Energy for Load                                 | 255.24 | 268.99 | 272.75 | 278.10 | 282.95 | 287.40 | 292.90 | 297.45 | 302.04 | 306.90 | 311.71 | 316.01 | 320.59 | 325.25 | 330.12 | 334.40 | 338.66 | 342.32 | 345.85 | 348.96 | 352.50 | 355.62 | 1.5%      |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 100.50 | 105.11 | 106.43 | 107.80 | 98.02  | 99.30  | 99.30  | 98.80  | 98.85  | 98.90  | 98.94  | 98.99  | 99.03  | 99.08  | 99.12  | 99.15  | 99.18  | 99.25  | 99.37  | 99.53  | 99.73  | 99.96  | 0.0%      |
| Petroleum   | 0.12   | 0.26   | 0.37   | 0.33   | 0.37   | 0.33   | 0.30   | 0.27   | 0.26   | 0.26   | 0.23   | 0.18   | 0.15   | 0.15   | 0.15   | 0.14   | 0.12   | 0.10   | 0.09   | 0.09   | 0.08   | 0.08   | -1.9%     |
| Natural Gas   | 99.64  | 112.95 | 112.21 | 113.41 | 126.59 | 128.72 | 134.05 | 137.52 | 141.92 | 145.24 | 149.78 | 153.92 | 158.21 | 162.67 | 167.49 | 171.31 | 175.40 | 178.74 | 181.88 | 184.55 | 187.77 | 190.65 | 3.0%      |
| Nuclear   | 38.69  | 34.41  | 34.64  | 34.79  | 34.87  | 34.94  | 35.01  | 35.08  | 35.15  | 35.22  | 35.29  | 35.36  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | -0.4%     |
| Pumped Storage/Other 3/                                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Renewable 4/  | 1.05   | 1.33   | 2.13   | 2.93   | 3.38   | 4.29   | 4.84   | 6.58   | 7.13   | 8.29   | 8.24   | 8.20   | 8.30   | 8.26   | 8.23   | 8.52   | 8.62   | 8.60   | 8.58   | 8.56   | 8.68   | 8.67   | 10.1%     |
| Total Generation  | 240.00 | 254.06 | 255.78 | 259.27 | 263.22 | 267.58 | 273.49 | 278.24 | 283.31 | 287.90 | 292.49 | 296.65 | 301.07 | 305.53 | 310.35 | 314.49 | 318.69 | 322.05 | 325.29 | 328.09 | 331.63 | 334.73 | 1.5%      |
| Sales to Customers  | 239.52 | 253.12 | 254.66 | 257.78 | 261.53 | 265.47 | 271.13 | 275.37 | 280.17 | 284.21 | 288.80 | 292.96 | 297.38 | 301.83 | 306.65 | 310.47 | 314.72 | 318.08 | 321.32 | 324.12 | 327.66 | 330.76 | 1.5%      |
| Generation for Own Use                                    | 0.47   | 0.94   | 1.12   | 1.49   | 1.69   | 2.11   | 2.36   | 2.87   | 3.14   | 3.69   | 3.69   | 3.69   | 3.69   | 3.69   | 3.69   | 4.02   | 3.97   | 3.97   | 3.97   | 3.97   | 3.97   | 3.97   | 10.1%     |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 2.91   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.86   | 2.86   | 2.86   | 2.86   | 2.86   | 2.86   | 2.86   | 2.86   | 2.85   | 2.85   | 2.85   | 2.85   | -0.1%     |
| Petroleum   | 1.45   | 1.34   | 1.34   | 1.34   | 1.34   | 1.34   | 1.34   | 1.34   | 1.34   | 1.35   | 1.35   | 1.35   | 1.35   | 1.35   | 1.35   | 1.35   | 1.35   | 1.36   | 1.36   | 1.36   | 1.36   | 1.36   | -0.3%     |
| Natural Gas   | 50.50  | 50.72  | 51.07  | 51.44  | 51.80  | 52.14  | 52.55  | 52.91  | 53.26  | 53.80  | 54.18  | 54.69  | 55.28  | 55.83  | 56.38  | 57.08  | 57.80  | 58.52  | 59.35  | 60.01  | 60.65  | 61.18  | 0.9%      |
| Other Gaseous Fuels                                       | 0.14   | 0.26   | 0.26   | 0.26   | 0.26   | 0.26   | 0.26   | 0.27   | 0.27   | 0.27   | 0.27   | 0.28   | 0.28   | 0.29   | 0.29   | 0.30   | 0.30   | 0.31   | 0.32   | 0.32   | 0.32   | 0.33   | 4.0%      |
| Renewable   | 0.69   | 0.59   | 0.61   | 0.62   | 0.64   | 0.65   | 0.67   | 0.68   | 0.69   | 0.70   | 0.71   | 0.72   | 0.72   | 0.73   | 0.74   | 0.76   | 0.77   | 0.78   | 0.78   | 0.79   | 0.80   | 0.81   | 0.7%      |
| Other   | 1.31   | 1.37   | 1.37   | 1.37   | 1.37   | 1.37   | 1.38   | 1.38   | 1.38   | 1.38   | 1.38   | 1.38   | 1.39   | 1.39   | 1.39   | 1.40   | 1.40   | 1.40   | 1.41   | 1.41   | 1.41   | 1.41   | 0.4%      |
| Total   | 57.00  | 57.16  | 57.52  | 57.90  | 58.28  | 58.63  | 59.07  | 59.45  | 59.81  | 60.37  | 60.76  | 61.29  | 61.89  | 62.45  | 63.02  | 63.74  | 64.48  | 65.22  | 66.07  | 66.74  | 67.40  | 67.95  | 0.8%      |
| Sales to Utilities  | 18.31  | 19.30  | 19.34  | 19.57  | 19.77  | 19.98  | 20.21  | 20.44  | 20.67  | 20.93  | 21.18  | 21.44  | 21.72  | 22.02  | 22.32  | 22.64  | 22.94  | 23.25  | 23.56  | 23.82  | 24.08  | 24.26  | 1.3%      |
| Generation for Own Use                                    | 38.70  | 37.86  | 38.19  | 38.33  | 38.51  | 38.66  | 38.86  | 39.01  | 39.14  | 39.44  | 39.58  | 39.85  | 40.17  | 40.43  | 40.70  | 41.10  | 41.54  | 41.97  | 42.50  | 42.92  | 43.33  | 43.69  | 0.6%      |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 7.9    | 7.7    | 7.4    | 7.2    | 7.3    | 7.4    | 7.2    | 7.2    | 7.2    | 7.0    | 6.8    | 6.7    | 6.6    | 6.6    | 6.5    | 6.6    | 6.7    | 6.6    | 6.7    | 6.8    | 6.8    | 6.9    | -0.6%     |
| Commercial  | 6.5    | 6.4    | 6.1    | 6.0    | 6.0    | 6.1    | 5.9    | 5.9    | 6.0    | 5.8    | 5.6    | 5.6    | 5.5    | 5.4    | 5.4    | 5.5    | 5.5    | 5.5    | 5.5    | 5.6    | 5.6    | 5.7    | -0.6%     |
| Industrial  | 4.0    | 4.0    | 3.9    | 3.8    | 3.9    | 4.0    | 3.9    | 4.0    | 4.1    | 4.1    | 4.0    | 3.9    | 3.8    | 3.8    | 3.8    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 4.0    | 0.0%      |
| Transportation  | 4.2    | 4.2    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.2    | 4.2    | 4.2    | 4.2    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.0    | -0.2%     |
| All Sectors Average                                       | 6.2    | 6.1    | 5.9    | 5.8    | 5.8    | 5.9    | 5.7    | 5.8    | 5.8    | 5.7    | 5.5    | 5.5    | 5.4    | 5.4    | 5.3    | 5.4    | 5.4    | 5.4    | 5.5    | 5.5    | 5.5    | 5.7    | -0.4%     |

**Table 61. Electric Power Projections for EMM Region (3 of 3)  
02 - Electric Reliability Council of Texas**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-<br>2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Coal                                  | 1.09   | 1.14   | 1.15   | 1.16   | 1.06   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.07   | 1.08   | -0.1%         |
| Natural Gas                           | 1.11   | 1.16   | 1.16   | 1.16   | 1.30   | 1.32   | 1.34   | 1.37   | 1.39   | 1.43   | 1.43   | 1.45   | 1.46   | 1.47   | 1.48   | 1.51   | 1.53   | 1.52   | 1.52   | 1.51   | 1.51   | 1.52   | 1.4%          |
| Oil                                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -2.6%         |
| Total                                 | 2.20   | 2.30   | 2.31   | 2.33   | 2.36   | 2.39   | 2.42   | 2.44   | 2.46   | 2.50   | 2.50   | 2.52   | 2.53   | 2.54   | 2.55   | 2.58   | 2.60   | 2.59   | 2.59   | 2.58   | 2.59   | 2.60   | 0.7%          |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Carbon Dioxide                        | 181.87 | 187.52 | 188.37 | 190.05 | 186.83 | 189.38 | 190.55 | 191.64 | 192.91 | 194.86 | 194.93 | 196.43 | 196.51 | 197.30 | 198.01 | 199.49 | 200.82 | 200.18 | 200.11 | 199.84 | 200.06 | 200.65 | 0.4%          |
| Sulfur Dioxide                        | 0.38   | 0.35   | 0.38   | 0.39   | 0.39   | 0.39   | 0.39   | 0.38   | 0.38   | 0.38   | 0.38   | 0.37   | 0.37   | 0.37   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.0%          |
| Nitrogen Oxide                        | 0.49   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.38   | 0.37   | 0.37   | 0.36   | 0.36   | 0.36   | 0.36   | 0.35   | 0.34   | 0.34   | 0.34   | -1.7%         |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatt-hour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 62. Electric Power Projections for EMM Region (1 of 3)  
03 - Mid-Atlantic Area Council**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 18.80        | 18.65        | 18.46        | 18.46        | 18.41        | 18.41        | 18.35        | 18.35        | 18.35        | 18.32        | 18.32        | 18.32        | 18.35        | 18.36        | 18.37        | 18.39        | 18.42        | 18.46        | 18.51        | 18.56        | 18.60        | 18.60        | 0.0%        |
| Other Fossil Steam 2/                                    | 8.64         | 8.35         | 8.35         | 8.35         | 8.20         | 8.16         | 8.12         | 8.12         | 8.12         | 8.12         | 8.12         | 8.12         | 8.12         | 8.12         | 8.12         | 8.12         | 8.12         | 7.55         | 7.55         | 7.12         | 7.12         | 6.36         | -1.4%       |
| Combined Cycle   | 1.95         | 2.08         | 2.27         | 3.42         | 4.21         | 5.23         | 5.34         | 6.96         | 6.96         | 7.66         | 8.54         | 8.86         | 9.52         | 9.67         | 10.21        | 10.99        | 12.04        | 12.88        | 13.61        | 14.21        | 14.21        | 14.63        | 9.6%        |
| Combustion Turbine/Diesel                                | 8.76         | 8.93         | 9.79         | 9.88         | 10.13        | 10.25        | 10.77        | 10.94        | 11.87        | 12.54        | 12.57        | 12.66        | 12.74        | 13.03        | 13.30        | 13.47        | 14.08        | 14.12        | 15.09        | 15.09        | 15.10        | 15.10        | 2.5%        |
| Nuclear Power  | 12.98        | 13.02        | 13.02        | 13.02        | 13.02        | 13.02        | 13.02        | 11.91        | 11.91        | 11.91        | 11.91        | 10.17        | 10.17        | 10.17        | 9.08         | 6.37         | 6.37         | 5.53         | 5.53         | 5.53         | 5.53         | 5.53         | -3.8%       |
| Pumped Storage/Other 3/                                  | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | 1.34         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03         | 0.04         | 0.04         | 0.05         | 0.05         | 0.05         | 0.05         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | N/A         |
| Renewable 4/   | 1.70         | 1.71         | 1.77         | 1.77         | 1.80         | 1.83         | 1.86         | 1.91         | 2.01         | 2.16         | 2.37         | 2.64         | 2.96         | 3.34         | 3.34         | 3.34         | 3.34         | 3.46         | 3.46         | 3.46         | 3.46         | 3.46         | 3.3%        |
| <b>Total Capability</b>                                  | <b>54.18</b> | <b>54.09</b> | <b>55.00</b> | <b>56.24</b> | <b>57.13</b> | <b>58.26</b> | <b>58.82</b> | <b>59.56</b> | <b>60.59</b> | <b>62.09</b> | <b>63.22</b> | <b>62.17</b> | <b>63.25</b> | <b>64.08</b> | <b>63.80</b> | <b>62.06</b> | <b>63.75</b> | <b>63.40</b> | <b>65.15</b> | <b>65.37</b> | <b>65.44</b> | <b>65.10</b> | <b>0.8%</b> |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.03         | 0.03         | 0.04         | 0.04         | 0.05         | 0.05         | 0.05         | 0.05         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | N/A         |
| Renewable 4/   | 0.00         | 0.01         | 0.01         | 0.01         | 0.03         | 0.06         | 0.08         | 0.14         | 0.24         | 0.39         | 0.60         | 0.87         | 1.19         | 1.57         | 1.57         | 1.57         | 1.57         | 1.69         | 1.69         | 1.69         | 1.69         | 1.69         | N/A         |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.19</b>  | <b>0.19</b>  | <b>0.19</b>  | <b>0.22</b>  | <b>0.25</b>  | <b>0.28</b>  | <b>0.33</b>  | <b>0.44</b>  | <b>0.60</b>  | <b>0.81</b>  | <b>1.08</b>  | <b>1.41</b>  | <b>1.79</b>  | <b>1.79</b>  | <b>1.79</b>  | <b>1.79</b>  | <b>1.94</b>  | <b>1.94</b>  | <b>1.94</b>  | <b>1.94</b>  | <b>1.94</b>  | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.07         | 0.11         | 0.14         | 0.19         | 0.24         | 0.29         | 0.29         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.13         | 0.32         | 1.46         | 2.25         | 3.27         | 3.39         | 5.00         | 5.00         | 5.70         | 6.59         | 6.90         | 7.57         | 7.71         | 8.25         | 9.04         | 10.08        | 10.93        | 11.65        | 12.26        | 12.26        | 12.68        | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.05         | 0.92         | 1.01         | 1.26         | 1.38         | 1.90         | 2.09         | 3.01         | 3.72         | 3.75         | 3.84         | 3.92         | 4.21         | 4.48         | 4.65         | 5.26         | 5.30         | 6.27         | 6.27         | 6.29         | 6.29         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.05         | 0.06         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | 0.07         | N/A         |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.18</b>  | <b>1.29</b>  | <b>2.53</b>  | <b>3.58</b>  | <b>4.72</b>  | <b>5.36</b>  | <b>7.17</b>  | <b>8.09</b>  | <b>9.50</b>  | <b>10.41</b> | <b>10.84</b> | <b>11.59</b> | <b>12.03</b> | <b>12.85</b> | <b>13.82</b> | <b>15.51</b> | <b>16.44</b> | <b>18.18</b> | <b>18.83</b> | <b>18.90</b> | <b>19.32</b> | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.37</b>  | <b>1.47</b>  | <b>2.72</b>  | <b>3.80</b>  | <b>4.96</b>  | <b>5.64</b>  | <b>7.50</b>  | <b>8.53</b>  | <b>10.10</b> | <b>11.23</b> | <b>11.92</b> | <b>13.00</b> | <b>13.82</b> | <b>14.65</b> | <b>15.62</b> | <b>17.31</b> | <b>18.38</b> | <b>20.12</b> | <b>20.77</b> | <b>20.84</b> | <b>21.26</b> | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.46</b>  | <b>0.70</b>  | <b>0.70</b>  | <b>0.90</b>  | <b>0.93</b>  | <b>1.04</b>  | <b>2.16</b>  | <b>2.16</b>  | <b>2.22</b>  | <b>2.22</b>  | <b>3.97</b>  | <b>3.97</b>  | <b>3.97</b>  | <b>5.06</b>  | <b>7.77</b>  | <b>7.77</b>  | <b>9.19</b>  | <b>9.19</b>  | <b>9.62</b>  | <b>9.62</b>  | <b>10.38</b> | <b>N/A</b>  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal   | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 1.02         | 0.0%        |
| Petroleum  | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.33         | 0.0%        |
| Natural Gas  | 2.16         | 2.17         | 2.17         | 2.17         | 2.17         | 2.18         | 2.18         | 2.18         | 2.18         | 2.18         | 2.19         | 2.19         | 2.19         | 2.20         | 2.20         | 2.20         | 2.21         | 2.21         | 2.22         | 2.22         | 2.22         | 2.23         | 0.1%        |
| Other Gaseous Fuels                                      | 0.07         | 0.11         | 0.11         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.13         | 0.13         | 0.13         | 0.13         | 0.13         | 0.14         | 0.14         | 0.14         | 0.14         | 0.15         | 0.15         | 0.15         | 3.7%        |
| Renewables   | 0.14         | 0.14         | 0.15         | 0.15         | 0.15         | 0.15         | 0.15         | 0.15         | 0.15         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.17         | 0.17         | 0.17         | 0.7%        |
| Other  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 3.0%        |
| <b>Total</b>   | <b>3.73</b>  | <b>3.78</b>  | <b>3.79</b>  | <b>3.79</b>  | <b>3.80</b>  | <b>3.80</b>  | <b>3.81</b>  | <b>3.81</b>  | <b>3.81</b>  | <b>3.82</b>  | <b>3.83</b>  | <b>3.83</b>  | <b>3.84</b>  | <b>3.84</b>  | <b>3.85</b>  | <b>3.86</b>  | <b>3.87</b>  | <b>3.87</b>  | <b>3.88</b>  | <b>3.89</b>  | <b>3.90</b>  | <b>3.91</b>  | <b>0.2%</b> |

**Table 62. Electric Power Projections for EMM Region (2 of 3)  
03 - Mid-Atlantic Area Council**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 83.54  | 90.28  | 91.81  | 93.16  | 94.52  | 95.71  | 97.05  | 98.20  | 99.42  | 100.84 | 102.27 | 103.17 | 104.19 | 105.16 | 106.12 | 106.88 | 107.81 | 108.70 | 109.63 | 110.48 | 111.45 | 112.46 | 1.4%      |
| Commercial/Other  | 80.43  | 86.33  | 87.58  | 88.77  | 89.84  | 90.76  | 91.87  | 92.60  | 93.75  | 94.91  | 96.12  | 96.65  | 97.73  | 98.53  | 99.14  | 99.35  | 99.57  | 99.77  | 99.93  | 99.89  | 99.84  | 99.62  | 1.0%      |
| Industrial  | 66.58  | 69.85  | 69.99  | 71.10  | 72.54  | 73.71  | 74.92  | 75.66  | 76.49  | 77.24  | 77.72  | 78.29  | 78.69  | 79.61  | 80.59  | 81.58  | 82.65  | 83.15  | 83.86  | 84.52  | 85.29  | 86.05  | 1.2%      |
| Transportation  | 1.60   | 1.72   | 1.75   | 1.79   | 1.97   | 2.15   | 2.31   | 2.46   | 2.58   | 2.71   | 2.84   | 2.96   | 3.08   | 3.20   | 3.31   | 3.42   | 3.47   | 3.44   | 3.40   | 3.36   | 3.30   | 3.24   | 3.3%      |
| Total Sales   | 232.16 | 248.17 | 251.13 | 254.81 | 258.88 | 262.33 | 266.16 | 268.92 | 272.25 | 275.69 | 278.94 | 281.08 | 283.70 | 286.50 | 289.16 | 291.24 | 293.50 | 295.07 | 296.82 | 298.25 | 299.87 | 301.38 | 1.2%      |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Gross International Exports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Gross Interregional Elec. Imports                         | 30.12  | 44.58  | 45.28  | 44.03  | 44.07  | 43.66  | 43.38  | 40.10  | 41.54  | 39.66  | 39.23  | 38.94  | 37.78  | 36.48  | 34.63  | 36.75  | 37.06  | 35.51  | 34.11  | 32.58  | 33.41  | 33.38  | 0.5%      |
| Gross Interregional Elec. Exports                         | 21.94  | 25.50  | 26.60  | 28.47  | 30.82  | 34.37  | 33.47  | 34.27  | 33.02  | 33.56  | 33.08  | 34.04  | 31.41  | 31.72  | 31.95  | 27.66  | 26.85  | 27.88  | 28.07  | 28.70  | 27.73  | 27.93  | 1.1%      |
| Purchases from cogenerators 6/                            | 12.81  | 12.25  | 12.26  | 12.27  | 12.30  | 12.32  | 12.38  | 12.40  | 12.43  | 12.48  | 12.50  | 12.53  | 12.56  | 12.59  | 12.62  | 12.66  | 12.69  | 12.72  | 12.76  | 12.79  | 12.81  | 12.84  | 0.0%      |
| Util. Generation for Customers                            | 230.04 | 233.75 | 237.10 | 243.83 | 250.14 | 257.42 | 260.68 | 267.45 | 268.19 | 274.07 | 277.17 | 280.47 | 281.65 | 285.95 | 290.50 | 286.19 | 287.16 | 291.33 | 294.68 | 298.25 | 298.17 | 299.96 | 1.2%      |
| Total Net Energy for Load                                 | 251.03 | 265.08 | 268.04 | 271.66 | 275.68 | 279.03 | 282.97 | 285.68 | 289.15 | 292.64 | 295.82 | 297.90 | 300.58 | 303.29 | 305.81 | 307.94 | 310.06 | 311.68 | 313.48 | 314.92 | 316.66 | 318.26 | 1.1%      |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 111.70 | 112.00 | 114.73 | 117.50 | 121.54 | 125.62 | 126.89 | 127.90 | 128.73 | 129.43 | 129.42 | 129.57 | 129.01 | 129.45 | 129.76 | 130.91 | 131.90 | 132.13 | 132.91 | 133.30 | 134.02 | 133.96 | 0.8%      |
| Petroleum   | 9.30   | 5.02   | 4.04   | 3.04   | 2.62   | 2.15   | 2.14   | 1.96   | 1.67   | 1.17   | 1.08   | 1.29   | 1.09   | 1.07   | 1.01   | 1.10   | 1.12   | 0.97   | 0.95   | 0.80   | 0.81   | 0.72   | -11.0%    |
| Natural Gas   | 6.26   | 13.66  | 14.53  | 18.99  | 21.34  | 24.36  | 26.35  | 34.50  | 39.25  | 44.50  | 46.24  | 55.47  | 61.08  | 62.74  | 67.97  | 76.87  | 89.33  | 93.94  | 101.21 | 104.54 | 103.73 | 105.67 | 13.7%     |
| Nuclear   | 97.13  | 95.40  | 95.59  | 95.78  | 95.91  | 96.13  | 96.07  | 93.40  | 88.27  | 88.52  | 88.95  | 81.78  | 76.28  | 76.28  | 74.94  | 60.48  | 48.00  | 46.86  | 42.05  | 42.05  | 42.05  | 42.05  | -3.7%     |
| Pumped Storage/Other 3/                                   | -0.57  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -23.2%    |
| Renewable 4/  | 7.22   | 8.67   | 9.21   | 9.52   | 9.74   | 10.13  | 10.20  | 10.66  | 11.24  | 11.42  | 12.45  | 13.32  | 15.17  | 17.37  | 17.79  | 17.79  | 17.79  | 18.39  | 18.53  | 18.53  | 18.52  | 18.52  | 4.4%      |
| Total Generation  | 231.04 | 234.75 | 238.10 | 244.83 | 251.14 | 258.38 | 261.65 | 268.41 | 269.16 | 275.03 | 278.13 | 281.44 | 282.61 | 286.91 | 291.47 | 287.15 | 288.13 | 292.30 | 295.65 | 299.22 | 299.13 | 300.93 | 1.2%      |
| Sales to Customers  | 230.04 | 233.75 | 237.10 | 243.83 | 250.14 | 257.42 | 260.68 | 267.45 | 268.19 | 274.07 | 277.17 | 280.47 | 281.65 | 285.95 | 290.50 | 286.19 | 287.16 | 291.33 | 294.68 | 298.25 | 298.17 | 299.96 | 1.2%      |
| Generation for Own Use                                    | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | -0.2%     |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 5.16   | 5.08   | 5.10   | 5.08   | 5.08   | 5.08   | 5.11   | 5.10   | 5.11   | 5.12   | 5.12   | 5.12   | 5.12   | 5.12   | 5.12   | 5.12   | 5.12   | 5.11   | 5.11   | 5.11   | 5.11   | 5.11   | 0.0%      |
| Petroleum   | 0.97   | 1.47   | 1.47   | 1.47   | 1.47   | 1.47   | 1.48   | 1.48   | 1.48   | 1.49   | 1.50   | 1.50   | 1.51   | 1.52   | 1.52   | 1.53   | 1.54   | 1.55   | 1.56   | 1.57   | 1.58   | 1.59   | 2.2%      |
| Natural Gas   | 10.95  | 10.29  | 10.31  | 10.32  | 10.34  | 10.35  | 10.37  | 10.38  | 10.40  | 10.42  | 10.43  | 10.45  | 10.48  | 10.50  | 10.52  | 10.55  | 10.58  | 10.61  | 10.64  | 10.67  | 10.69  | 10.72  | -0.1%     |
| Other Gaseous Fuels                                       | 0.85   | 1.57   | 1.57   | 1.57   | 1.58   | 1.59   | 1.62   | 1.63   | 1.63   | 1.67   | 1.68   | 1.70   | 1.74   | 1.76   | 1.78   | 1.83   | 1.85   | 1.88   | 1.92   | 1.95   | 1.97   | 1.99   | 4.0%      |
| Renewable   | 0.70   | 0.66   | 0.66   | 0.67   | 0.67   | 0.68   | 0.69   | 0.69   | 0.70   | 0.70   | 0.71   | 0.71   | 0.71   | 0.72   | 0.72   | 0.73   | 0.73   | 0.74   | 0.74   | 0.74   | 0.75   | 0.75   | 0.3%      |
| Other   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Total   | 18.64  | 19.07  | 19.11  | 19.11  | 19.15  | 19.18  | 19.26  | 19.29  | 19.31  | 19.41  | 19.43  | 19.48  | 19.56  | 19.61  | 19.66  | 19.76  | 19.82  | 19.88  | 19.98  | 20.04  | 20.10  | 20.16  | 0.4%      |
| Sales to Utilities  | 12.81  | 12.25  | 12.26  | 12.27  | 12.30  | 12.32  | 12.38  | 12.40  | 12.43  | 12.48  | 12.50  | 12.53  | 12.56  | 12.59  | 12.62  | 12.66  | 12.69  | 12.72  | 12.76  | 12.79  | 12.81  | 12.84  | 0.0%      |
| Generation for Own Use                                    | 5.83   | 6.82   | 6.84   | 6.84   | 6.85   | 6.86   | 6.88   | 6.88   | 6.88   | 6.93   | 6.93   | 6.95   | 6.99   | 7.01   | 7.04   | 7.10   | 7.13   | 7.16   | 7.22   | 7.26   | 7.29   | 7.31   | 1.0%      |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 9.4    | 9.1    | 8.9    | 8.7    | 8.5    | 8.3    | 8.2    | 8.2    | 8.2    | 8.1    | 8.0    | 8.2    | 8.2    | 8.1    | 8.1    | 8.5    | 8.4    | 8.4    | 8.3    | 8.3    | 8.4    | 8.4    | -0.5%     |
| Commercial  | 8.5    | 8.0    | 7.8    | 7.6    | 7.3    | 7.0    | 6.8    | 6.7    | 6.7    | 6.4    | 6.3    | 6.5    | 6.4    | 6.4    | 6.3    | 6.7    | 6.7    | 6.6    | 6.5    | 6.5    | 6.5    | 6.6    | -1.1%     |
| Industrial  | 6.5    | 6.3    | 6.1    | 5.8    | 5.5    | 5.2    | 5.1    | 4.9    | 4.9    | 4.7    | 4.6    | 4.8    | 4.8    | 4.7    | 4.7    | 5.0    | 5.0    | 4.9    | 4.8    | 4.8    | 4.9    | 4.9    | -1.3%     |
| Transportation  | 6.3    | 5.9    | 5.7    | 5.5    | 5.4    | 5.2    | 5.1    | 5.1    | 5.0    | 4.9    | 4.9    | 5.0    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 5.0    | 5.0    | -1.1%     |
| All Sectors Average                                       | 8.2    | 7.9    | 7.7    | 7.5    | 7.2    | 6.9    | 6.8    | 6.7    | 6.7    | 6.5    | 6.4    | 6.6    | 6.6    | 6.5    | 6.5    | 6.9    | 6.8    | 6.7    | 6.7    | 6.7    | 6.7    | 6.8    | -0.9%     |

**Table 62. Electric Power Projections for EMM Region (3 of 3)  
03 - Mid-Atlantic Area Council**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal                                  | 1.12   | 1.15   | 1.17   | 1.21   | 1.26   | 1.31   | 1.32   | 1.33   | 1.34   | 1.35   | 1.35   | 1.35   | 1.34   | 1.35   | 1.35   | 1.37   | 1.38   | 1.38   | 1.38   | 1.39   | 1.39   | 1.39   | 1.0%      |
| Natural Gas                           | 0.08   | 0.15   | 0.15   | 0.17   | 0.19   | 0.20   | 0.22   | 0.27   | 0.31   | 0.35   | 0.35   | 0.43   | 0.46   | 0.47   | 0.51   | 0.57   | 0.66   | 0.68   | 0.73   | 0.75   | 0.75   | 0.76   | 10.6%     |
| Oil                                   | 0.11   | 0.06   | 0.05   | 0.04   | 0.03   | 0.02   | 0.02   | 0.02   | 0.02   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | -11.1%    |
| Total                                 | 1.31   | 1.35   | 1.37   | 1.42   | 1.48   | 1.54   | 1.57   | 1.63   | 1.67   | 1.71   | 1.71   | 1.79   | 1.82   | 1.83   | 1.87   | 1.95   | 2.05   | 2.07   | 2.13   | 2.15   | 2.15   | 2.16   | 2.3%      |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Carbon Dioxide                        | 125.55 | 130.46 | 132.34 | 136.66 | 142.33 | 147.39 | 149.77 | 153.83 | 156.74 | 159.22 | 159.40 | 163.91 | 165.02 | 166.19 | 168.57 | 173.77 | 179.93 | 181.47 | 185.05 | 186.36 | 186.67 | 187.16 | 1.8%      |
| Sulfur Dioxide                        | 1.48   | 1.27   | 1.05   | 0.79   | 0.64   | 0.63   | 0.60   | 0.58   | 0.57   | 0.57   | 0.61   | 0.53   | 0.51   | 0.51   | 0.52   | 0.51   | 0.52   | 0.53   | 0.52   | 0.55   | 0.54   | 0.56   | -4.4%     |
| Nitrogen Oxide                        | 0.30   | 0.27   | 0.28   | 0.29   | 0.30   | 0.31   | 0.31   | 0.32   | 0.32   | 0.33   | 0.33   | 0.33   | 0.34   | 0.34   | 0.34   | 0.35   | 0.36   | 0.36   | 0.36   | 0.36   | 0.37   | 0.37   | 0.9%      |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatt-hour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 63. Electric Power Projections for EMM Region (1 of 3)  
04 - Mid-America Interconnected Network**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 27.69        | 27.66        | 27.66        | 27.66        | 27.66        | 27.66        | 27.66        | 27.66        | 27.66        | 27.70        | 27.70        | 28.44        | 28.89        | 29.26        | 29.66        | 30.07        | 30.31        | 30.44        | 30.79        | 30.65        | 31.38        | 31.65        | 0.6%        |
| Other Fossil Steam 2/                                    | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 3.69         | 0.0%        |
| Combined Cycle   | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.42         | 0.42         | 0.42         | 0.42         | 1.78         | 2.48         | 2.97         | 3.18         | 3.67         | 3.91         | 4.06         | 4.16         | 4.47         | 4.84         | 5.03         | 5.12         | 13.5%       |
| Combustion Turbine/Diesel                                | 7.56         | 10.33        | 11.54        | 12.75        | 14.08        | 15.28        | 16.94        | 18.36        | 20.35        | 21.43        | 21.82        | 21.94        | 22.10        | 22.25        | 22.59        | 22.39        | 22.44        | 22.74        | 22.04        | 22.32        | 22.53        | 22.59        | 5.1%        |
| Nuclear Power  | 12.72        | 12.77        | 12.77        | 12.77        | 12.77        | 12.77        | 12.77        | 12.00        | 12.00        | 12.00        | 12.00        | 12.00        | 11.22        | 11.22        | 10.07        | 10.07        | 10.07        | 10.07        | 10.07        | 10.07        | 10.07        | 10.07        | -1.1%       |
| Pumped Storage/Other 3/                                  | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | 0.35         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.82         | 0.84         | 0.84         | 0.84         | 0.84         | 0.84         | 0.85         | 0.85         | 0.85         | 0.85         | 0.85         | 0.85         | 0.85         | 0.85         | 0.85         | 0.85         | 0.86         | 0.87         | 0.88         | 0.88         | 0.92         | 0.93         | 0.6%        |
| <b>Total Capability</b>                                  | <b>53.14</b> | <b>55.95</b> | <b>57.17</b> | <b>58.37</b> | <b>59.70</b> | <b>60.90</b> | <b>62.67</b> | <b>63.32</b> | <b>65.31</b> | <b>66.44</b> | <b>68.19</b> | <b>69.74</b> | <b>70.07</b> | <b>70.80</b> | <b>70.88</b> | <b>71.32</b> | <b>71.79</b> | <b>72.32</b> | <b>72.29</b> | <b>72.81</b> | <b>73.96</b> | <b>74.40</b> | <b>1.5%</b> |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | N/A         |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.18</b>  | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.04         | 0.04         | 0.78         | 1.23         | 1.60         | 2.00         | 2.42         | 2.66         | 2.79         | 3.15         | 3.70         | 4.43         | 4.70         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.10         | 0.10         | 0.10         | 1.47         | 2.17         | 2.66         | 2.87         | 3.36         | 3.59         | 3.75         | 3.85         | 4.15         | 4.53         | 4.72         | 4.81         | 4.81         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 2.35         | 3.56         | 4.78         | 6.10         | 7.30         | 9.10         | 10.59        | 12.59        | 13.67        | 14.06        | 14.18        | 14.33        | 14.48        | 14.83        | 14.89        | 14.94        | 15.24        | 15.66        | 15.94        | 16.14        | 16.20        | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.03         | 0.04         | 0.05         | 0.09         | 0.09         | N/A         |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>2.35</b>  | <b>3.56</b>  | <b>4.78</b>  | <b>6.10</b>  | <b>7.30</b>  | <b>9.21</b>  | <b>10.71</b> | <b>12.70</b> | <b>13.82</b> | <b>15.58</b> | <b>17.13</b> | <b>18.23</b> | <b>18.96</b> | <b>20.19</b> | <b>20.91</b> | <b>21.37</b> | <b>21.91</b> | <b>23.00</b> | <b>24.22</b> | <b>25.37</b> | <b>25.81</b> | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>2.53</b>  | <b>3.74</b>  | <b>4.96</b>  | <b>6.28</b>  | <b>7.48</b>  | <b>9.39</b>  | <b>10.89</b> | <b>12.88</b> | <b>14.00</b> | <b>15.76</b> | <b>17.31</b> | <b>18.41</b> | <b>19.14</b> | <b>20.37</b> | <b>21.09</b> | <b>21.55</b> | <b>22.09</b> | <b>23.18</b> | <b>24.40</b> | <b>25.55</b> | <b>25.99</b> | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.03</b>  | <b>0.03</b>  | <b>0.04</b>  | <b>0.04</b>  | <b>0.04</b>  | <b>0.17</b>  | <b>1.02</b>  | <b>1.02</b>  | <b>1.02</b>  | <b>1.02</b>  | <b>1.02</b>  | <b>1.80</b>  | <b>1.80</b>  | <b>2.95</b>  | <b>3.22</b>  | <b>3.22</b>  | <b>3.22</b>  | <b>4.34</b>  | <b>5.04</b>  | <b>5.04</b>  | <b>5.04</b>  | <b>N/A</b>  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal   | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.80         | 0.0%        |
| Petroleum  | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.0%        |
| Natural Gas  | 0.29         | 0.29         | 0.29         | 0.30         | 0.30         | 0.30         | 0.30         | 0.31         | 0.31         | 0.31         | 0.31         | 0.32         | 0.32         | 0.32         | 0.33         | 0.33         | 0.34         | 0.34         | 0.35         | 0.35         | 0.36         | 0.36         | 1.1%        |
| Other Gaseous Fuels                                      | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 3.7%        |
| Renewables   | 0.27         | 0.27         | 0.28         | 0.28         | 0.29         | 0.30         | 0.30         | 0.31         | 0.31         | 0.32         | 0.32         | 0.33         | 0.33         | 0.33         | 0.34         | 0.34         | 0.35         | 0.35         | 0.36         | 0.36         | 0.37         | 0.37         | 1.5%        |
| Other  | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 3.0%        |
| <b>Total</b>   | <b>1.39</b>  | <b>1.41</b>  | <b>1.42</b>  | <b>1.42</b>  | <b>1.43</b>  | <b>1.44</b>  | <b>1.45</b>  | <b>1.46</b>  | <b>1.47</b>  | <b>1.48</b>  | <b>1.48</b>  | <b>1.49</b>  | <b>1.50</b>  | <b>1.51</b>  | <b>1.51</b>  | <b>1.53</b>  | <b>1.54</b>  | <b>1.54</b>  | <b>1.55</b>  | <b>1.56</b>  | <b>1.57</b>  | <b>1.58</b>  | <b>0.6%</b> |



**Table 63. Electric Power Projections for EMM Region (3 of 3)  
04 - Mid-America Interconnected Network**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-<br>2020 |       |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|-------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |       |
| Coal                                  | 1.47   | 1.60   | 1.68   | 1.74   | 1.82   | 1.89   | 1.91   | 1.93   | 1.95   | 1.97   | 1.98   | 2.00   | 2.04   | 2.06   | 2.11   | 2.14   | 2.17   | 2.19   | 2.20   | 2.19   | 2.23   | 2.25   | 2.0%          |       |
| Natural Gas                           | 0.07   | 0.02   | 0.02   | 0.01   | 0.01   | 0.01   | 0.01   | 0.02   | 0.02   | 0.02   | 0.04   | 0.05   | 0.06   | 0.07   | 0.08   | 0.08   | 0.09   | 0.10   | 0.10   | 0.11   | 0.11   | 0.11   | 1.8%          |       |
| Oil                                   | 0.01   | 0.01   | 0.01   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | -2.5%         |       |
| Total                                 | 1.56   | 1.63   | 1.70   | 1.76   | 1.84   | 1.91   | 1.93   | 1.95   | 1.97   | 1.99   | 2.02   | 2.06   | 2.10   | 2.13   | 2.20   | 2.23   | 2.27   | 2.29   | 2.31   | 2.31   | 2.35   | 2.37   | 1.9%          |       |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |       |
| Carbon Dioxide                        | 150.59 | 167.85 | 175.06 | 181.30 | 189.73 | 196.68 | 198.88 | 201.10 | 203.04 | 204.76 | 207.64 | 210.29 | 214.25 | 217.31 | 223.67 | 227.06 | 230.50 | 232.36 | 234.07 | 233.48 | 237.58 | 239.92 | 2.1%          |       |
| Sulfur Dioxide                        | 1.02   | 0.97   | 1.06   | 1.08   | 1.13   | 1.17   | 1.17   | 1.18   | 1.06   | 0.84   | 1.21   | 0.80   | 0.80   | 0.81   | 0.82   | 0.83   | 0.83   | 0.84   | 0.84   | 0.84   | 0.83   | 0.84   | 0.87          | -0.7% |
| Nitrogen Oxide                        | 0.47   | 0.40   | 0.43   | 0.44   | 0.46   | 0.48   | 0.49   | 0.49   | 0.50   | 0.51   | 0.51   | 0.51   | 0.51   | 0.51   | 0.52   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.53   | 0.6%          |       |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatt-hour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 64. Electric Power Projections for EMM Region (1 of 3)  
05 - Mid-Continent Area Power Pool**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 20.86        | 21.35        | 21.35        | 21.35        | 20.73        | 20.73        | 20.73        | 20.70        | 20.70        | 20.70        | 20.71        | 20.72        | 20.73        | 20.74        | 20.76        | 20.78        | 20.80        | 20.83        | 20.85        | 20.88        | 20.90        | 20.90        | 0.0%        |
| Other Fossil Steam 2/                                    | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | N/A         |
| Combined Cycle   | 0.43         | 0.43         | 0.43         | 0.43         | 0.43         | 0.88         | 0.92         | 1.35         | 1.35         | 1.68         | 2.10         | 2.47         | 2.87         | 3.16         | 3.39         | 3.70         | 4.01         | 4.43         | 4.59         | 4.77         | 4.86         | 4.95         | 11.8%       |
| Combustion Turbine/Diesel                                | 6.07         | 6.14         | 6.30         | 6.84         | 7.31         | 7.63         | 8.29         | 8.94         | 9.40         | 9.94         | 10.06        | 10.14        | 10.43        | 10.58        | 11.03        | 11.26        | 11.82        | 12.33        | 12.74        | 12.94        | 13.24        | 13.42        | 3.7%        |
| Nuclear Power  | 3.75         | 3.79         | 3.79         | 3.79         | 3.32         | 2.54         | 2.54         | 2.54         | 2.54         | 2.54         | 2.54         | 1.96         | 1.96         | 1.96         | 1.58         | 1.04         | 1.04         | 1.04         | 1.04         | 1.04         | 1.04         | 1.04         | -5.7%       |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 3.74         | 4.15         | 4.32         | 4.51         | 4.52         | 4.52         | 4.53         | 4.54         | 4.55         | 4.56         | 4.56         | 4.57         | 4.58         | 4.58         | 4.58         | 4.59         | 4.59         | 4.60         | 4.60         | 4.60         | 4.60         | 4.61         | 0.9%        |
| <b>Total Capability</b>                                  | <b>35.47</b> | <b>36.47</b> | <b>36.81</b> | <b>37.53</b> | <b>36.92</b> | <b>36.92</b> | <b>37.63</b> | <b>38.68</b> | <b>39.15</b> | <b>40.04</b> | <b>40.57</b> | <b>40.46</b> | <b>41.17</b> | <b>41.63</b> | <b>41.94</b> | <b>41.97</b> | <b>42.86</b> | <b>43.82</b> | <b>44.42</b> | <b>44.82</b> | <b>45.25</b> | <b>45.54</b> | <b>1.1%</b> |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.40         | 0.48         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | 0.65         | N/A         |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.41</b>  | <b>0.48</b>  | <b>0.66</b>  | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.02         | 0.03         | 0.05         | 0.06         | 0.08         | 0.10         | 0.13         | 0.15         | 0.18         | 0.20         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.45         | 0.49         | 0.92         | 0.92         | 1.25         | 1.67         | 2.04         | 2.44         | 2.73         | 2.96         | 3.27         | 3.58         | 4.00         | 4.16         | 4.34         | 4.43         | 4.52         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.03         | 0.20         | 0.73         | 1.21         | 1.53         | 2.19         | 2.88         | 3.34         | 3.88         | 3.99         | 4.07         | 4.37         | 4.52         | 4.97         | 5.20         | 5.76         | 6.27         | 6.68         | 6.88         | 7.18         | 7.36         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.10         | 0.11         | 0.12         | 0.12         | 0.13         | 0.14         | 0.15         | 0.15         | 0.16         | 0.17         | 0.17         | 0.18         | 0.18         | 0.19         | 0.19         | 0.19         | 0.20         | 0.20         | 0.20         | 0.20         | N/A         |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.03</b>  | <b>0.30</b>  | <b>0.84</b>  | <b>1.32</b>  | <b>2.10</b>  | <b>2.81</b>  | <b>3.93</b>  | <b>4.40</b>  | <b>5.28</b>  | <b>5.82</b>  | <b>6.29</b>  | <b>7.00</b>  | <b>7.46</b>  | <b>8.16</b>  | <b>8.72</b>  | <b>9.61</b>  | <b>10.57</b> | <b>11.17</b> | <b>11.57</b> | <b>11.99</b> | <b>12.28</b> | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.44</b>  | <b>0.78</b>  | <b>1.50</b>  | <b>1.98</b>  | <b>2.75</b>  | <b>3.47</b>  | <b>4.59</b>  | <b>5.06</b>  | <b>5.94</b>  | <b>6.48</b>  | <b>6.94</b>  | <b>7.66</b>  | <b>8.11</b>  | <b>8.81</b>  | <b>9.38</b>  | <b>10.27</b> | <b>11.22</b> | <b>11.83</b> | <b>12.23</b> | <b>12.65</b> | <b>12.94</b> | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>1.09</b>  | <b>1.87</b>  | <b>1.87</b>  | <b>1.94</b>  | <b>1.94</b>  | <b>1.94</b>  | <b>1.94</b>  | <b>2.52</b>  | <b>2.52</b>  | <b>2.52</b>  | <b>2.90</b>  | <b>3.44</b>  | <b>N/A</b>  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal   | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.61         | 0.0%        |
| Petroleum  | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.1%        |
| Natural Gas  | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 1.0%        |
| Other Gaseous Fuels                                      | 0.03         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 3.7%        |
| Renewables   | 0.23         | 0.23         | 0.23         | 0.24         | 0.24         | 0.25         | 0.25         | 0.26         | 0.26         | 0.27         | 0.27         | 0.27         | 0.28         | 0.28         | 0.28         | 0.29         | 0.29         | 0.30         | 0.30         | 0.30         | 0.31         | 0.31         | 1.4%        |
| Other  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 3.0%        |
| <b>Total</b>   | <b>0.93</b>  | <b>0.95</b>  | <b>0.96</b>  | <b>0.97</b>  | <b>0.97</b>  | <b>0.98</b>  | <b>0.98</b>  | <b>0.99</b>  | <b>0.99</b>  | <b>1.00</b>  | <b>1.00</b>  | <b>1.01</b>  | <b>1.01</b>  | <b>1.01</b>  | <b>1.02</b>  | <b>1.03</b>  | <b>1.03</b>  | <b>1.03</b>  | <b>1.04</b>  | <b>1.04</b>  | <b>1.05</b>  | <b>1.05</b>  | <b>0.6%</b> |

**Table 64. Electric Power Projections for EMM Region (2 of 3)  
05 - Mid-Continent Area Power Pool**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Residential   | 50.47  | 54.85  | 55.57  | 56.21  | 56.85  | 57.47  | 58.37  | 59.00  | 59.65  | 60.26  | 60.98  | 61.64  | 62.38  | 63.18  | 63.88  | 64.59  | 65.21  | 65.85  | 66.49  | 67.16  | 67.92  | 68.71  | 1.4%      |  |
| Commercial/Other  | 36.94  | 40.01  | 40.69  | 41.25  | 41.70  | 42.20  | 42.92  | 43.42  | 43.92  | 44.45  | 45.02  | 45.50  | 46.18  | 46.79  | 47.25  | 47.63  | 47.84  | 48.07  | 48.24  | 48.37  | 48.52  | 48.63  | 1.3%      |  |
| Industrial  | 56.13  | 57.76  | 57.77  | 58.80  | 60.23  | 61.34  | 62.55  | 63.25  | 64.07  | 64.73  | 65.14  | 65.78  | 66.27  | 67.06  | 68.03  | 69.06  | 69.97  | 70.50  | 71.17  | 71.91  | 72.83  | 73.81  | 1.3%      |  |
| Transportation  | 0.79   | 0.85   | 0.87   | 0.89   | 0.98   | 1.07   | 1.15   | 1.22   | 1.29   | 1.35   | 1.42   | 1.48   | 1.55   | 1.61   | 1.67   | 1.72   | 1.75   | 1.74   | 1.72   | 1.69   | 1.67   | 1.64   | 3.4%      |  |
| Total Sales   | 144.32 | 153.47 | 154.89 | 157.15 | 159.77 | 162.08 | 164.99 | 166.88 | 168.92 | 170.79 | 172.56 | 174.41 | 176.37 | 178.63 | 180.83 | 183.00 | 184.77 | 186.15 | 187.61 | 189.14 | 190.94 | 192.78 | 1.3%      |  |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Gross International Imports                               | 12.59  | 7.76   | 7.18   | 6.38   | 6.38   | 6.38   | 2.00   | 2.00   | 2.00   | 1.84   | 1.68   | 1.52   | 1.36   | 1.20   | 1.04   | 0.88   | 0.72   | 0.56   | 0.40   | 0.24   | 0.08   | 0.00   | N/A       |  |
| Gross International Exports                               | 1.53   | 1.99   | 1.99   | 1.99   | 1.99   | 1.99   | 1.99   | 1.99   | 1.99   | 1.83   | 1.67   | 1.51   | 1.35   | 1.19   | 1.03   | 0.87   | 0.72   | 0.56   | 0.40   | 0.24   | 0.08   | 0.00   | N/A       |  |
| Gross Interregional Elec. Imports                         | 12.05  | 9.53   | 8.71   | 8.38   | 8.39   | 8.39   | 5.17   | 4.72   | 4.98   | 4.30   | 3.75   | 3.47   | 3.25   | 2.69   | 2.24   | 1.98   | 2.04   | 1.59   | 1.49   | 1.16   | 0.99   | 1.05   | -10.5%    |  |
| Gross Interregional Elec. Exports                         | 27.42  | 26.49  | 26.45  | 26.47  | 25.19  | 24.49  | 19.71  | 20.00  | 19.59  | 19.31  | 19.13  | 18.45  | 17.22  | 17.67  | 16.90  | 16.01  | 12.13  | 13.12  | 13.09  | 12.93  | 11.44  | 10.90  | -4.1%     |  |
| Purchases from cogenerators 6/                            | 0.30   | 0.19   | 0.20   | 0.23   | 0.25   | 0.28   | 0.31   | 0.33   | 0.36   | 0.39   | 0.41   | 0.44   | 0.46   | 0.49   | 0.52   | 0.55   | 0.57   | 0.60   | 0.63   | 0.66   | 0.68   | 0.71   | 4.0%      |  |
| Util. Generation for Customers                            | 162.77 | 171.85 | 175.01 | 178.11 | 179.05 | 181.43 | 184.01 | 186.65 | 188.02 | 190.19 | 192.76 | 194.90 | 195.40 | 197.52 | 198.56 | 199.38 | 205.58 | 208.15 | 209.57 | 211.17 | 211.54 | 212.62 | 1.2%      |  |
| Total Net Energy for Load                                 | 158.76 | 160.86 | 162.66 | 164.64 | 166.90 | 170.00 | 169.79 | 171.71 | 173.78 | 175.57 | 177.80 | 180.37 | 181.90 | 183.03 | 184.43 | 185.90 | 196.08 | 197.23 | 198.60 | 200.06 | 201.77 | 203.49 | 1.1%      |  |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Coal  | 121.14 | 126.87 | 129.75 | 133.53 | 135.16 | 141.62 | 144.76 | 145.45 | 146.00 | 146.45 | 147.01 | 147.42 | 148.47 | 148.60 | 149.03 | 149.45 | 150.52 | 150.62 | 150.91 | 151.21 | 151.51 | 151.80 | 1.0%      |  |
| Petroleum   | 0.94   | 0.40   | 0.35   | 0.29   | 0.27   | 0.27   | 0.34   | 0.28   | 0.31   | 0.31   | 0.32   | 0.29   | 0.29   | 0.28   | 0.28   | 0.31   | 0.31   | 0.27   | 0.27   | 0.25   | 0.25   | 0.28   | -5.3%     |  |
| Natural Gas   | 1.79   | 2.30   | 1.44   | 1.05   | 0.96   | 2.64   | 3.43   | 5.43   | 6.12   | 7.83   | 9.73   | 12.20  | 15.33  | 17.31  | 19.66  | 22.72  | 29.19  | 31.67  | 32.79  | 34.10  | 34.16  | 34.92  | 14.5%     |  |
| Nuclear   | 25.41  | 26.28  | 26.28  | 26.28  | 25.68  | 19.87  | 18.40  | 18.36  | 18.41  | 18.39  | 18.46  | 17.70  | 13.97  | 13.97  | 12.22  | 9.50   | 8.15   | 8.15   | 8.15   | 8.15   | 8.15   | 8.15   | -5.0%     |  |
| Pumped Storage/Other 3/                                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |  |
| Renewable 4/  | 14.48  | 17.97  | 19.15  | 19.83  | 19.86  | 19.90  | 19.95  | 20.00  | 20.04  | 20.09  | 20.13  | 20.16  | 20.20  | 20.22  | 20.25  | 20.27  | 20.29  | 20.31  | 20.33  | 20.33  | 20.34  | 20.35  | 1.6%      |  |
| Total Generation  | 163.76 | 173.81 | 176.96 | 180.98 | 181.93 | 184.30 | 186.88 | 189.52 | 190.89 | 193.06 | 195.64 | 197.77 | 198.27 | 200.39 | 201.44 | 202.25 | 208.45 | 211.03 | 212.44 | 214.05 | 214.41 | 215.50 | 1.3%      |  |
| Sales to Customers  | 162.77 | 171.85 | 175.01 | 178.11 | 179.05 | 181.43 | 184.01 | 186.65 | 188.02 | 190.19 | 192.76 | 194.90 | 195.40 | 197.52 | 198.56 | 199.38 | 205.58 | 208.15 | 209.57 | 211.17 | 211.54 | 212.62 | 1.2%      |  |
| Generation for Own Use                                    | 0.99   | 1.95   | 1.95   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 2.87   | 5.0%      |  |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Coal  | 2.88   | 2.83   | 2.83   | 2.84   | 2.84   | 2.84   | 2.84   | 2.84   | 2.84   | 2.84   | 2.83   | 2.83   | 2.83   | 2.83   | 2.83   | 2.83   | 2.83   | 2.83   | 2.82   | 2.82   | 2.82   | 2.82   | -0.1%     |  |
| Petroleum   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.04   | 0.04   | 0.04   | 0.04   | 0.9%      |  |
| Natural Gas   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 1.1%      |  |
| Other Gaseous Fuels                                       | 0.03   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | 4.0%      |  |
| Renewable   | 0.99   | 0.99   | 1.01   | 1.03   | 1.05   | 1.08   | 1.10   | 1.11   | 1.13   | 1.14   | 1.16   | 1.17   | 1.18   | 1.19   | 1.21   | 1.23   | 1.24   | 1.26   | 1.27   | 1.28   | 1.29   | 1.30   | 1.3%      |  |
| Other   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |  |
| Total   | 3.98   | 3.95   | 3.98   | 4.00   | 4.03   | 4.05   | 4.07   | 4.09   | 4.10   | 4.12   | 4.13   | 4.15   | 4.15   | 4.17   | 4.18   | 4.20   | 4.22   | 4.23   | 4.24   | 4.26   | 4.27   | 4.29   | 0.3%      |  |
| Sales to Utilities  | 0.30   | 0.19   | 0.20   | 0.23   | 0.25   | 0.28   | 0.31   | 0.33   | 0.36   | 0.39   | 0.41   | 0.44   | 0.46   | 0.49   | 0.52   | 0.55   | 0.57   | 0.60   | 0.63   | 0.66   | 0.68   | 0.71   | 4.0%      |  |
| Generation for Own Use                                    | 3.67   | 3.76   | 3.78   | 3.78   | 3.77   | 3.77   | 3.76   | 3.75   | 3.74   | 3.73   | 3.72   | 3.71   | 3.69   | 3.68   | 3.66   | 3.66   | 3.65   | 3.63   | 3.62   | 3.60   | 3.59   | 3.58   | -0.1%     |  |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Residential   | 7.3    | 6.9    | 6.9    | 6.8    | 6.8    | 6.8    | 6.5    | 6.5    | 6.5    | 6.5    | 6.5    | 6.6    | 6.4    | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    | 6.2    | 6.1    | -0.8%     |  |
| Commercial  | 6.5    | 6.1    | 6.1    | 6.0    | 6.0    | 5.9    | 5.7    | 5.7    | 5.7    | 5.7    | 5.7    | 5.7    | 5.5    | 5.5    | 5.5    | 5.5    | 5.5    | 5.5    | 5.4    | 5.4    | 5.4    | 5.3    | -0.9%     |  |
| Industrial  | 4.3    | 4.1    | 4.1    | 4.0    | 4.0    | 3.9    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.7    | 3.6    | 3.6    | 3.6    | 3.5    | 3.5    | 3.5    | 3.5    | 3.4    | 3.4    | -1.1%     |  |
| Transportation  | 5.6    | 5.3    | 5.2    | 5.2    | 5.1    | 5.0    | 4.9    | 4.9    | 4.9    | 4.8    | 4.8    | 4.8    | 4.7    | 4.6    | 4.5    | 4.5    | 4.4    | 4.4    | 4.4    | 4.4    | 4.3    | 4.3    | -1.3%     |  |
| All Sectors Average                                       | 5.9    | 5.6    | 5.6    | 5.5    | 5.5    | 5.5    | 5.2    | 5.2    | 5.2    | 5.2    | 5.2    | 5.3    | 5.3    | 5.1    | 5.0    | 5.0    | 5.0    | 5.0    | 5.0    | 5.0    | 4.9    | 4.9    | -0.9%     |  |

**Table 64. Electric Power Projections for EMM Region (3 of 3)  
05 - Mid-Continent Area Power Pool**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-<br>2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Coal                                  | 1.33   | 1.39   | 1.42   | 1.47   | 1.49   | 1.56   | 1.60   | 1.61   | 1.61   | 1.62   | 1.63   | 1.63   | 1.64   | 1.64   | 1.65   | 1.65   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67   | 1.68   | 1.1%          |
| Natural Gas                           | 0.02   | 0.03   | 0.02   | 0.01   | 0.01   | 0.02   | 0.03   | 0.05   | 0.05   | 0.06   | 0.08   | 0.09   | 0.12   | 0.13   | 0.15   | 0.17   | 0.22   | 0.24   | 0.24   | 0.25   | 0.25   | 0.26   | 11.4%         |
| Oil                                   | 0.01   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -5.6%         |
| Total                                 | 1.37   | 1.42   | 1.45   | 1.48   | 1.50   | 1.59   | 1.63   | 1.66   | 1.67   | 1.69   | 1.71   | 1.73   | 1.76   | 1.78   | 1.80   | 1.83   | 1.89   | 1.91   | 1.92   | 1.93   | 1.93   | 1.94   | 1.6%          |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Carbon Dioxide                        | 137.09 | 148.84 | 151.49 | 155.72 | 157.54 | 166.07 | 170.49 | 172.29 | 173.42 | 174.66 | 176.09 | 177.40 | 179.86 | 180.77 | 182.22 | 184.02 | 188.35 | 189.20 | 189.87 | 190.66 | 190.90 | 191.54 | 1.5%          |
| Sulfur Dioxide                        | 0.48   | 0.47   | 0.43   | 0.43   | 0.44   | 0.46   | 0.47   | 0.48   | 0.47   | 0.47   | 0.49   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | -0.1%         |
| Nitrogen Oxide                        | 0.39   | 0.29   | 0.30   | 0.31   | 0.31   | 0.33   | 0.34   | 0.34   | 0.34   | 0.34   | 0.35   | 0.35   | 0.35   | 0.35   | 0.35   | 0.36   | 0.36   | 0.36   | 0.36   | 0.36   | 0.36   | 0.37   | -0.3%         |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatthour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 65. Electric Power Projections for EMM Region (1 of 3)  
06 - Northeast Power Coordinating Council/New York**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020    |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Coal Steam   | 4.82         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | 4.66         | -0.2%        |
| Other Fossil Steam 2/                                    | 12.33        | 12.33        | 12.33        | 12.33        | 10.74        | 9.67         | 9.20         | 8.45         | 8.45         | 8.45         | 8.45         | 8.45         | 8.45         | 8.34         | 8.34         | 7.18         | 7.18         | 7.18         | 7.18         | 7.08         | 7.08         | 6.70         | -2.7%        |
| Combined Cycle   | 0.99         | 0.99         | 0.99         | 0.99         | 0.99         | 0.99         | 0.99         | 0.99         | 1.62         | 1.62         | 2.42         | 2.42         | 3.13         | 3.81         | 4.12         | 5.04         | 5.55         | 6.45         | 6.58         | 6.58         | 6.58         | 6.62         | 9.0%         |
| Combustion Turbine/Diesel                                | 3.71         | 3.71         | 3.71         | 3.71         | 3.71         | 3.70         | 4.46         | 4.46         | 4.85         | 5.11         | 5.35         | 6.18         | 6.47         | 6.51         | 6.60         | 6.66         | 6.67         | 6.70         | 6.70         | 6.70         | 6.70         | 6.70         | 2.7%         |
| Nuclear Power  | 4.96         | 4.96         | 4.96         | 4.96         | 4.03         | 4.03         | 4.03         | 4.03         | 4.03         | 4.03         | 2.93         | 2.93         | 2.93         | 2.93         | 2.93         | 2.11         | 1.14         | 1.14         | 1.14         | 1.14         | 1.14         | 1.14         | -6.5%        |
| Pumped Storage/Other 3/                                  | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | 1.28         | N/A          |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Renewable 4/   | 4.60         | 4.59         | 4.67         | 4.81         | 4.88         | 4.95         | 5.02         | 5.17         | 5.17         | 5.17         | 5.17         | 5.18         | 5.18         | 5.18         | 5.19         | 5.19         | 5.20         | 5.20         | 5.20         | 5.20         | 5.20         | 5.21         | 0.6%         |
| <b>Total Capability</b>                                  | <b>32.69</b> | <b>32.52</b> | <b>32.59</b> | <b>32.73</b> | <b>30.28</b> | <b>29.29</b> | <b>29.63</b> | <b>29.03</b> | <b>30.06</b> | <b>30.32</b> | <b>30.26</b> | <b>31.09</b> | <b>32.09</b> | <b>32.71</b> | <b>33.10</b> | <b>32.13</b> | <b>31.67</b> | <b>32.60</b> | <b>32.73</b> | <b>32.64</b> | <b>32.64</b> | <b>32.30</b> | <b>-0.1%</b> |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Renewable 4/   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>N/A</b>   |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.63         | 0.63         | 1.43         | 1.43         | 2.14         | 2.82         | 3.12         | 4.05         | 4.56         | 5.46         | 5.59         | 5.59         | 5.59         | 5.63         | N/A          |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.99         | 0.99         | 1.39         | 1.65         | 1.89         | 2.72         | 3.01         | 3.05         | 3.14         | 3.20         | 3.21         | 3.23         | 3.23         | 3.23         | 3.24         | 3.24         | N/A          |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A          |
| Renewable 4/   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.03         | 0.03         | 0.03         | 0.04         | 0.04         | 0.04         | N/A          |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.99</b>  | <b>0.99</b>  | <b>2.02</b>  | <b>2.28</b>  | <b>3.33</b>  | <b>4.16</b>  | <b>5.16</b>  | <b>5.89</b>  | <b>6.28</b>  | <b>7.28</b>  | <b>7.80</b>  | <b>8.72</b>  | <b>8.86</b>  | <b>8.86</b>  | <b>8.87</b>  | <b>8.91</b>  | <b>N/A</b>   |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.99</b>  | <b>0.99</b>  | <b>2.02</b>  | <b>2.28</b>  | <b>3.33</b>  | <b>4.16</b>  | <b>5.16</b>  | <b>5.89</b>  | <b>6.28</b>  | <b>7.28</b>  | <b>7.80</b>  | <b>8.72</b>  | <b>8.86</b>  | <b>8.86</b>  | <b>8.87</b>  | <b>8.91</b>  | <b>N/A</b>   |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.17</b>  | <b>0.17</b>  | <b>0.17</b>  | <b>2.69</b>  | <b>3.76</b>  | <b>4.48</b>  | <b>5.22</b>  | <b>5.22</b>  | <b>5.22</b>  | <b>6.33</b>  | <b>6.33</b>  | <b>6.33</b>  | <b>6.44</b>  | <b>6.44</b>  | <b>8.41</b>  | <b>9.38</b>  | <b>9.38</b>  | <b>9.38</b>  | <b>9.48</b>  | <b>9.48</b>  | <b>9.87</b>  | <b>N/A</b>   |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Coal   | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.36         | 0.0%         |
| Petroleum  | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.1%         |
| Natural Gas  | 4.74         | 4.74         | 4.74         | 4.74         | 4.75         | 4.75         | 4.75         | 4.75         | 4.75         | 4.76         | 4.76         | 4.76         | 4.76         | 4.76         | 4.77         | 4.77         | 4.77         | 4.78         | 4.78         | 4.78         | 4.79         | 4.79         | 0.1%         |
| Other Gaseous Fuels                                      | 0.03         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.05         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 3.7%         |
| Renewables   | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.18         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.19         | 0.20         | 0.20         | 0.20         | 0.20         | 0.8%         |
| Other  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 3.0%         |
| <b>Total</b>   | <b>5.35</b>  | <b>5.37</b>  | <b>5.37</b>  | <b>5.38</b>  | <b>5.38</b>  | <b>5.38</b>  | <b>5.39</b>  | <b>5.39</b>  | <b>5.40</b>  | <b>5.40</b>  | <b>5.41</b>  | <b>5.41</b>  | <b>5.41</b>  | <b>5.42</b>  | <b>5.42</b>  | <b>5.43</b>  | <b>5.43</b>  | <b>5.44</b>  | <b>5.45</b>  | <b>5.45</b>  | <b>5.46</b>  | <b>5.46</b>  | <b>0.1%</b>  |

**Table 65. Electric Power Projections for EMM Region (2 of 3)  
06 - Northeast Power Coordinating Council/New York**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 40.21  | 46.36  | 47.03  | 47.61  | 48.18  | 48.61  | 49.17  | 49.61  | 50.10  | 50.69  | 51.29  | 51.52  | 51.91  | 52.24  | 52.58  | 52.78  | 53.08  | 53.40  | 53.72  | 54.00  | 54.33  | 54.68  | 1.4%      |
| Commercial/Other  | 64.72  | 69.50  | 70.30  | 71.08  | 71.76  | 72.27  | 72.96  | 73.27  | 74.06  | 74.78  | 75.54  | 75.64  | 76.24  | 76.60  | 76.83  | 76.70  | 76.61  | 76.55  | 76.44  | 76.19  | 75.89  | 75.49  | 0.7%      |
| Industrial  | 25.10  | 29.73  | 29.80  | 30.25  | 30.80  | 31.24  | 31.69  | 31.92  | 32.20  | 32.45  | 32.59  | 32.74  | 32.79  | 33.11  | 33.42  | 33.74  | 34.11  | 34.24  | 34.44  | 34.62  | 34.84  | 35.04  | 1.5%      |
| Transportation  | 1.03   | 1.11   | 1.13   | 1.15   | 1.27   | 1.38   | 1.48   | 1.57   | 1.64   | 1.72   | 1.79   | 1.87   | 1.94   | 2.01   | 2.07   | 2.14   | 2.16   | 2.13   | 2.10   | 2.07   | 2.03   | 1.99   | 3.0%      |
| Total Sales   | 131.06 | 146.70 | 148.27 | 150.09 | 152.01 | 153.50 | 155.29 | 156.37 | 158.01 | 159.64 | 161.21 | 161.77 | 162.88 | 163.95 | 164.90 | 165.35 | 165.96 | 166.32 | 166.70 | 166.89 | 167.08 | 167.20 | 1.1%      |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                               | 4.13   | 16.75  | 18.64  | 19.90  | 19.76  | 15.80  | 15.71  | 17.11  | 13.85  | 13.14  | 12.49  | 8.82   | 8.77   | 4.12   | 3.09   | 1.23   | 1.36   | 1.71   | 1.82   | 2.10   | 2.47   | 2.76   | -1.8%     |
| Gross International Exports                               | 1.80   | 1.43   | 1.44   | 1.45   | 1.47   | 1.48   | 1.49   | 1.50   | 1.51   | 1.52   | 1.54   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | 1.55   | -0.7%     |
| Gross Interregional Elec. Imports                         | 8.39   | 20.22  | 21.27  | 24.08  | 26.40  | 31.06  | 30.19  | 30.99  | 29.77  | 30.50  | 30.25  | 31.41  | 29.03  | 29.54  | 29.95  | 25.98  | 25.41  | 26.61  | 27.00  | 27.82  | 27.07  | 27.38  | 5.5%      |
| Gross Interregional Elec. Exports                         | 22.37  | 15.90  | 15.52  | 15.11  | 14.72  | 13.72  | 13.69  | 14.60  | 13.98  | 12.88  | 12.54  | 9.50   | 7.92   | 7.08   | 8.56   | 7.90   | 6.04   | 6.61   | 6.82   | 7.13   | 6.98   | 7.63   | -4.8%     |
| Purchases from cogenerators 6/                            | 28.11  | 26.98  | 26.99  | 26.99  | 27.00  | 27.01  | 27.02  | 27.03  | 27.04  | 27.05  | 27.06  | 27.07  | 27.13  | 27.15  | 27.17  | 27.19  | 27.21  | 27.23  | 27.25  | 27.27  | 27.29  | 27.31  | -0.1%     |
| Util. Generation for Customers                            | 128.13 | 110.88 | 109.20 | 106.61 | 106.03 | 105.91 | 108.63 | 108.36 | 113.82 | 114.35 | 116.48 | 116.51 | 118.39 | 122.72 | 125.64 | 131.10 | 130.22 | 129.62 | 129.73 | 129.13 | 129.54 | 129.72 | 0.1%      |
| Total Net Energy for Load                                 | 144.60 | 157.50 | 159.13 | 161.01 | 163.00 | 164.57 | 166.36 | 167.38 | 168.99 | 170.64 | 172.20 | 172.77 | 173.85 | 174.90 | 175.76 | 176.05 | 176.61 | 177.01 | 177.43 | 177.64 | 177.85 | 177.98 | 0.9%      |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 30.34  | 29.76  | 30.56  | 31.10  | 31.83  | 32.70  | 32.66  | 32.61  | 32.55  | 32.44  | 32.35  | 32.14  | 32.22  | 32.21  | 32.19  | 32.23  | 32.29  | 32.31  | 32.34  | 32.37  | 32.40  | 32.36  | 0.3%      |
| Petroleum   | 15.33  | 17.54  | 15.86  | 12.75  | 12.22  | 15.24  | 14.17  | 13.89  | 12.97  | 12.24  | 10.02  | 10.84  | 7.13   | 6.39   | 6.30   | 5.32   | 5.73   | 5.25   | 4.81   | 4.44   | 4.72   | 4.84   | -5.1%     |
| Natural Gas   | 21.42  | 10.02  | 9.00   | 8.43   | 8.31   | 8.89   | 12.38  | 11.83  | 18.19  | 19.49  | 25.05  | 30.85  | 36.66  | 41.73  | 44.76  | 51.15  | 55.25  | 61.67  | 62.19  | 61.91  | 62.01  | 62.11  | 5.0%      |
| Nuclear   | 31.31  | 34.48  | 34.55  | 34.54  | 33.44  | 28.47  | 28.47  | 28.43  | 28.35  | 28.27  | 27.00  | 20.48  | 20.48  | 20.48  | 20.48  | 20.48  | 15.00  | 8.42   | 8.42   | 8.42   | 8.42   | 8.42   | -5.8%     |
| Pumped Storage/Other 3/                                   | -1.16  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Renewable 4/  | 31.38  | 19.55  | 19.72  | 20.27  | 20.72  | 21.09  | 21.44  | 22.08  | 22.24  | 22.39  | 22.54  | 22.69  | 22.38  | 22.39  | 22.40  | 22.42  | 22.44  | 22.45  | 22.46  | 22.47  | 22.47  | 22.47  | -1.5%     |
| Total Generation  | 128.62 | 111.36 | 109.69 | 107.09 | 106.52 | 106.39 | 109.11 | 108.84 | 114.30 | 114.83 | 116.96 | 117.00 | 118.87 | 123.20 | 126.13 | 131.59 | 130.70 | 130.10 | 130.22 | 129.61 | 130.03 | 130.20 | 0.1%      |
| Sales to Customers  | 128.13 | 110.88 | 109.20 | 106.61 | 106.03 | 105.91 | 108.63 | 108.36 | 113.82 | 114.35 | 116.48 | 116.51 | 118.39 | 122.72 | 125.64 | 131.10 | 130.22 | 129.62 | 129.73 | 129.13 | 129.54 | 129.72 | 0.1%      |
| Generation for Own Use                                    | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.48   | 0.0%      |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 2.40   | 2.39   | 2.40   | 2.38   | 2.38   | 2.37   | 2.36   | 2.36   | 2.35   | 2.34   | 2.34   | 2.33   | 2.37   | 2.37   | 2.37   | 2.37   | 2.37   | 2.37   | 2.37   | 2.37   | 2.37   | 2.37   | -0.1%     |
| Petroleum   | 0.50   | 0.72   | 0.72   | 0.72   | 0.72   | 0.72   | 0.72   | 0.73   | 0.73   | 0.73   | 0.73   | 0.74   | 0.74   | 0.74   | 0.75   | 0.75   | 0.76   | 0.76   | 0.77   | 0.77   | 0.78   | 0.78   | 2.0%      |
| Natural Gas   | 28.50  | 27.98  | 27.99  | 28.00  | 28.00  | 28.01  | 28.02  | 28.03  | 28.04  | 28.05  | 28.06  | 28.07  | 28.09  | 28.10  | 28.11  | 28.13  | 28.15  | 28.16  | 28.18  | 28.20  | 28.21  | 28.23  | 0.0%      |
| Other Gaseous Fuels                                       | 0.43   | 0.80   | 0.80   | 0.80   | 0.81   | 0.82   | 0.83   | 0.83   | 0.83   | 0.86   | 0.86   | 0.87   | 0.89   | 0.90   | 0.91   | 0.94   | 0.95   | 0.96   | 0.99   | 1.00   | 1.01   | 1.02   | 4.0%      |
| Renewable   | 1.12   | 1.07   | 1.08   | 1.09   | 1.10   | 1.11   | 1.12   | 1.13   | 1.14   | 1.14   | 1.15   | 1.16   | 1.16   | 1.17   | 1.17   | 1.18   | 1.19   | 1.20   | 1.20   | 1.21   | 1.22   | 1.22   | 0.4%      |
| Other   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Total   | 32.96  | 32.96  | 32.99  | 32.99  | 33.01  | 33.03  | 33.06  | 33.07  | 33.09  | 33.13  | 33.14  | 33.17  | 33.25  | 33.28  | 33.32  | 33.37  | 33.41  | 33.45  | 33.51  | 33.55  | 33.58  | 33.62  | 0.1%      |
| Sales to Utilities  | 28.11  | 26.98  | 26.99  | 26.99  | 27.00  | 27.01  | 27.02  | 27.03  | 27.04  | 27.05  | 27.06  | 27.07  | 27.13  | 27.15  | 27.17  | 27.19  | 27.21  | 27.23  | 27.25  | 27.27  | 27.29  | 27.31  | -0.1%     |
| Generation for Own Use                                    | 4.85   | 5.98   | 6.00   | 6.00   | 6.02   | 6.02   | 6.04   | 6.05   | 6.05   | 6.08   | 6.08   | 6.10   | 6.12   | 6.13   | 6.14   | 6.18   | 6.20   | 6.22   | 6.26   | 6.28   | 6.29   | 6.31   | 1.2%      |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 13.5   | 13.0   | 12.6   | 12.3   | 12.1   | 12.2   | 12.0   | 12.2   | 11.8   | 11.7   | 11.5   | 11.8   | 11.6   | 11.6   | 11.6   | 11.6   | 11.7   | 11.8   | 11.8   | 11.8   | 11.8   | 11.8   | -0.6%     |
| Commercial  | 11.7   | 10.9   | 10.3   | 9.9    | 9.6    | 9.6    | 9.3    | 9.5    | 9.0    | 8.9    | 8.6    | 8.7    | 8.4    | 8.4    | 8.3    | 8.3    | 8.3    | 8.3    | 8.3    | 8.4    | 8.4    | 8.5    | -1.4%     |
| Industrial  | 5.5    | 5.4    | 5.1    | 5.0    | 4.9    | 5.1    | 5.1    | 5.4    | 5.1    | 5.1    | 4.9    | 5.1    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.9    | 4.9    | 5.0    | -0.4%     |
| Transportation  | 8.9    | 8.3    | 8.0    | 7.8    | 7.6    | 7.5    | 7.4    | 7.3    | 7.2    | 7.2    | 7.0    | 7.2    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | -1.1%     |
| All Sectors Average                                       | 10.9   | 10.4   | 10.0   | 9.6    | 9.4    | 9.5    | 9.3    | 9.5    | 9.1    | 9.0    | 8.8    | 8.9    | 8.7    | 8.6    | 8.6    | 8.6    | 8.7    | 8.7    | 8.7    | 8.7    | 8.7    | 8.8    | -1.0%     |

**Table 65. Electric Power Projections for EMM Region (3 of 3)  
06 - Northeast Power Coordinating Council/New York**

|                                       | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-<br>2020 |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| Fuel Consumption (quadrillion Btu) 8/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Coal                                  | 0.31  | 0.31  | 0.32  | 0.32  | 0.33  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.33  | 0.33  | 0.33  | 0.33  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | 0.4%          |
| Natural Gas                           | 0.24  | 0.10  | 0.09  | 0.08  | 0.08  | 0.09  | 0.13  | 0.12  | 0.17  | 0.18  | 0.22  | 0.27  | 0.31  | 0.34  | 0.36  | 0.40  | 0.43  | 0.46  | 0.47  | 0.46  | 0.46  | 0.46  | 3.1%          |
| Oil                                   | 0.16  | 0.18  | 0.16  | 0.13  | 0.13  | 0.16  | 0.14  | 0.14  | 0.13  | 0.13  | 0.10  | 0.11  | 0.07  | 0.06  | 0.06  | 0.05  | 0.06  | 0.05  | 0.05  | 0.04  | 0.05  | 0.05  | -5.2%         |
| Total                                 | 0.70  | 0.59  | 0.57  | 0.54  | 0.54  | 0.58  | 0.61  | 0.60  | 0.64  | 0.64  | 0.66  | 0.72  | 0.71  | 0.74  | 0.76  | 0.79  | 0.82  | 0.85  | 0.85  | 0.85  | 0.85  | 0.85  | 0.9%          |
| Emissions(million short tons) 9/      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |
| Carbon Dioxide                        | 66.00 | 52.86 | 51.51 | 48.88 | 49.18 | 53.29 | 54.58 | 53.95 | 56.04 | 55.84 | 55.87 | 59.47 | 58.20 | 59.41 | 60.49 | 61.89 | 63.95 | 65.86 | 65.60 | 65.17 | 65.53 | 65.55 | 0.0%          |
| Sulfur Dioxide                        | 0.47  | 0.35  | 0.29  | 0.27  | 0.28  | 0.29  | 0.28  | 0.28  | 0.27  | 0.25  | 0.26  | 0.23  | 0.21  | 0.20  | 0.20  | 0.20  | 0.21  | 0.21  | 0.22  | 0.22  | 0.23  | 0.23  | -3.3%         |
| Nitrogen Oxide                        | 0.11  | 0.09  | 0.09  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.11  | 0.10  | 0.10  | 0.10  | 0.10  | -0.1%         |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatthour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 66. Electric Power Projections for EMM Region (1 of 3)  
07 - Northeast Power Coordinating Council/New England**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 2.76         | 2.76         | 2.76         | 2.76         | 2.76         | 2.76         | 2.76         | 2.76         | 2.76         | 2.76         | 2.76         | 2.77         | 2.78         | 2.80         | 2.81         | 2.81         | 2.82         | 2.82         | 2.82         | 2.82         | 2.83         | 2.83         | 0.1%        |
| Other Fossil Steam 2/                                    | 8.13         | 8.03         | 8.03         | 8.03         | 7.12         | 7.12         | 7.12         | 6.92         | 6.63         | 6.63         | 6.63         | 5.83         | 5.58         | 5.58         | 5.58         | 5.58         | 5.58         | 5.58         | 5.58         | 5.58         | 5.58         | 5.58         | -1.7%       |
| Combined Cycle   | 1.31         | 1.57         | 1.57         | 2.10         | 2.64         | 3.22         | 3.50         | 3.50         | 3.50         | 3.50         | 3.97         | 3.97         | 4.74         | 5.55         | 5.79         | 6.10         | 6.43         | 6.43         | 6.43         | 6.45         | 6.51         | 6.51         | 7.6%        |
| Combustion Turbine/Diesel                                | 1.98         | 2.18         | 2.16         | 2.17         | 2.21         | 2.21         | 2.66         | 3.47         | 4.30         | 4.95         | 5.24         | 6.06         | 6.19         | 6.20         | 6.45         | 6.58         | 6.58         | 6.58         | 6.58         | 6.58         | 6.58         | 6.58         | 5.6%        |
| Nuclear Power  | 4.32         | 4.32         | 4.32         | 4.32         | 4.32         | 4.32         | 4.32         | 3.45         | 3.45         | 3.45         | 3.45         | 3.45         | 3.45         | 2.28         | 2.28         | 2.28         | 2.28         | 2.28         | 2.28         | 2.28         | 2.28         | 2.28         | -2.9%       |
| Pumped Storage/Other 3/                                  | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | 1.66         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 2.98         | 3.01         | 3.13         | 3.20         | 3.25         | 3.30         | 3.36         | 3.43         | 3.51         | 3.59         | 3.66         | 3.72         | 3.73         | 3.74         | 3.74         | 3.77         | 3.82         | 3.83         | 3.83         | 3.84         | 3.84         | 3.85         | 1.2%        |
| <b>Total Capability</b>                                  | <b>23.13</b> | <b>23.52</b> | <b>23.62</b> | <b>24.23</b> | <b>23.96</b> | <b>24.59</b> | <b>25.37</b> | <b>25.19</b> | <b>25.81</b> | <b>26.54</b> | <b>27.38</b> | <b>27.45</b> | <b>28.13</b> | <b>27.81</b> | <b>28.31</b> | <b>28.79</b> | <b>29.17</b> | <b>29.19</b> | <b>29.19</b> | <b>29.22</b> | <b>29.29</b> | <b>29.29</b> | <b>1.1%</b> |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | 0.26         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | 0.23         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.03         | 0.10         | 0.17         | 0.22         | 0.27         | 0.32         | 0.39         | 0.46         | 0.54         | 0.61         | 0.66         | 0.66         | 0.66         | 0.66         | 0.68         | 0.73         | 0.73         | 0.73         | 0.73         | 0.73         | 0.73         | N/A         |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.52</b>  | <b>0.59</b>  | <b>0.66</b>  | <b>0.71</b>  | <b>0.76</b>  | <b>0.81</b>  | <b>0.88</b>  | <b>0.95</b>  | <b>1.02</b>  | <b>1.10</b>  | <b>1.15</b>  | <b>1.15</b>  | <b>1.15</b>  | <b>1.15</b>  | <b>1.17</b>  | <b>1.21</b>  | <b>1.21</b>  | <b>1.21</b>  | <b>1.21</b>  | <b>1.21</b>  | <b>1.21</b>  | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.02         | 0.04         | 0.05         | 0.05         | 0.06         | 0.06         | 0.06         | 0.06         | 0.07         | 0.07         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.53         | 1.07         | 1.65         | 1.93         | 1.93         | 1.93         | 2.40         | 2.40         | 3.17         | 3.99         | 4.22         | 4.53         | 4.86         | 4.86         | 4.86         | 4.86         | 4.88         | 4.94         | 4.94         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.05         | 0.05         | 0.49         | 1.31         | 2.14         | 2.80         | 3.09         | 3.90         | 4.03         | 4.04         | 4.29         | 4.43         | 4.43         | 4.43         | 4.43         | 4.43         | 4.43         | 4.43         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.05         | 0.05         | 0.05         | 0.05         | 0.06         | 0.07         | 0.07         | 0.08         | 0.08         | 0.08         | 0.09         | 0.10         | 0.11         | 0.11         | 0.12         | 0.13         | 0.13         | 0.14         | 0.14         | 0.14         | N/A         |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.00</b>  | <b>0.05</b>  | <b>0.59</b>  | <b>1.17</b>  | <b>1.75</b>  | <b>2.49</b>  | <b>3.31</b>  | <b>4.15</b>  | <b>4.80</b>  | <b>5.57</b>  | <b>6.40</b>  | <b>7.32</b>  | <b>8.16</b>  | <b>8.67</b>  | <b>9.13</b>  | <b>9.46</b>  | <b>9.48</b>  | <b>9.48</b>  | <b>9.51</b>  | <b>9.58</b>  | <b>9.59</b>  | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.52</b>  | <b>0.64</b>  | <b>1.25</b>  | <b>1.88</b>  | <b>2.51</b>  | <b>3.29</b>  | <b>4.19</b>  | <b>5.10</b>  | <b>5.83</b>  | <b>6.67</b>  | <b>7.55</b>  | <b>8.47</b>  | <b>9.31</b>  | <b>9.82</b>  | <b>10.30</b> | <b>10.68</b> | <b>10.69</b> | <b>10.70</b> | <b>10.73</b> | <b>10.79</b> | <b>10.80</b> | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.14</b>  | <b>0.15</b>  | <b>0.15</b>  | <b>1.05</b>  | <b>1.05</b>  | <b>1.05</b>  | <b>2.13</b>  | <b>2.42</b>  | <b>2.42</b>  | <b>2.42</b>  | <b>3.23</b>  | <b>3.47</b>  | <b>4.64</b>  | <b>N/A</b>  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal   | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.41         | 0.0%        |
| Petroleum  | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.16         | 0.1%        |
| Natural Gas  | 1.18         | 1.64         | 1.64         | 1.64         | 1.64         | 1.64         | 1.64         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.65         | 1.6%        |
| Other Gaseous Fuels                                      | 0.08         | 0.13         | 0.13         | 0.13         | 0.13         | 0.14         | 0.14         | 0.14         | 0.14         | 0.14         | 0.14         | 0.15         | 0.15         | 0.15         | 0.15         | 0.16         | 0.16         | 0.16         | 0.17         | 0.17         | 0.17         | 0.17         | 3.7%        |
| Renewables   | 0.95         | 0.96         | 0.97         | 0.99         | 1.01         | 1.02         | 1.04         | 1.05         | 1.07         | 1.08         | 1.09         | 1.11         | 1.11         | 1.12         | 1.14         | 1.15         | 1.17         | 1.18         | 1.19         | 1.20         | 1.21         | 1.22         | 1.2%        |
| Other  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 3.0%        |
| <b>Total</b>   | <b>2.77</b>  | <b>3.30</b>  | <b>3.32</b>  | <b>3.34</b>  | <b>3.36</b>  | <b>3.37</b>  | <b>3.39</b>  | <b>3.41</b>  | <b>3.42</b>  | <b>3.44</b>  | <b>3.46</b>  | <b>3.47</b>  | <b>3.48</b>  | <b>3.50</b>  | <b>3.51</b>  | <b>3.53</b>  | <b>3.55</b>  | <b>3.56</b>  | <b>3.58</b>  | <b>3.59</b>  | <b>3.60</b>  | <b>3.62</b>  | <b>1.2%</b> |

**Table 66. Electric Power Projections for EMM Region (2 of 3)  
07 - Northeast Power Coordinating Council/New England**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 41.43  | 44.56  | 44.99  | 45.53  | 45.77  | 46.42  | 47.19  | 47.44  | 48.07  | 48.72  | 49.41  | 49.83  | 50.31  | 50.66  | 50.94  | 51.44  | 51.84  | 52.16  | 52.45  | 52.77  | 53.12  | 53.49  | 1.2%      |
| Commercial/Other  | 44.62  | 47.70  | 48.03  | 48.53  | 48.55  | 49.11  | 49.79  | 50.06  | 50.79  | 51.53  | 52.24  | 52.71  | 53.33  | 53.68  | 53.93  | 54.26  | 54.40  | 54.44  | 54.39  | 54.29  | 54.16  | 53.99  | 0.9%      |
| Industrial  | 24.94  | 25.91  | 25.93  | 26.33  | 26.84  | 27.23  | 27.63  | 27.85  | 28.10  | 28.32  | 28.44  | 28.58  | 28.68  | 28.92  | 29.21  | 29.50  | 29.81  | 29.93  | 30.11  | 30.26  | 30.45  | 30.61  | 0.9%      |
| Transportation  | 0.88   | 0.95   | 0.97   | 0.99   | 1.10   | 1.20   | 1.29   | 1.37   | 1.44   | 1.51   | 1.59   | 1.66   | 1.73   | 1.79   | 1.86   | 1.92   | 1.95   | 1.93   | 1.90   | 1.88   | 1.84   | 1.81   | 3.3%      |
| Total Sales   | 111.87 | 119.12 | 119.92 | 121.39 | 122.26 | 123.96 | 125.90 | 126.72 | 128.41 | 130.08 | 131.68 | 132.78 | 134.05 | 135.05 | 135.94 | 137.12 | 138.00 | 138.45 | 138.85 | 139.20 | 139.57 | 139.89 | 1.0%      |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                               | 15.44  | 13.48  | 10.05  | 9.93   | 9.92   | 10.01  | 9.93   | 9.93   | 9.93   | 9.79   | 9.64   | 9.49   | 9.32   | 9.19   | 9.02   | 8.80   | 8.53   | 8.46   | 8.38   | 8.25   | 8.10   | 8.04   | -2.9%     |
| Gross International Exports                               | 0.19   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.20   | 0.18   | 0.16   | 0.15   | 0.13   | 0.11   | 0.09   | 0.08   | 0.06   | 0.04   | 0.03   | 0.01   | 0.00   | N/A       |
| Gross Interregional Elec. Imports                         | 18.61  | 13.14  | 13.04  | 12.86  | 12.54  | 12.01  | 11.99  | 12.90  | 12.26  | 11.32  | 11.10  | 8.23   | 6.78   | 6.06   | 7.62   | 7.05   | 5.35   | 6.03   | 6.35   | 6.76   | 6.73   | 7.42   | -4.1%     |
| Gross Interregional Elec. Exports                         | 0.00   | 0.00   | 0.00   | 0.00   | 0.01   | 0.01   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.03   | 0.02   | 0.01   | 0.01   | 0.02   | 0.04   | 0.02   | 0.02   | 0.02   | 0.02   | 0.03   | N/A       |
| Purchases from cogenerators 6/                            | 9.71   | 8.71   | 8.72   | 8.76   | 8.80   | 8.84   | 8.89   | 8.93   | 8.97   | 9.02   | 9.06   | 9.11   | 9.15   | 9.20   | 9.25   | 9.31   | 9.36   | 9.41   | 9.47   | 9.52   | 9.57   | 9.63   | 0.0%      |
| Util. Generation for Customers                            | 77.30  | 91.87  | 96.17  | 97.90  | 99.02  | 101.15 | 103.20 | 103.04 | 105.34 | 108.02 | 109.93 | 113.90 | 116.68 | 118.40 | 117.81 | 119.67 | 122.40 | 122.20 | 122.33 | 122.35 | 122.86 | 122.53 | 2.1%      |
| Total Net Energy for Load                                 | 120.88 | 126.99 | 127.76 | 129.24 | 130.07 | 131.78 | 133.77 | 134.56 | 136.26 | 137.92 | 139.52 | 140.54 | 141.76 | 142.71 | 143.58 | 144.72 | 145.52 | 146.02 | 146.45 | 146.83 | 147.23 | 147.59 | 0.9%      |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 13.16  | 19.91  | 19.95  | 20.08  | 20.22  | 20.35  | 20.39  | 20.49  | 20.49  | 20.49  | 20.48  | 20.58  | 20.60  | 20.73  | 20.84  | 20.88  | 20.92  | 20.96  | 20.99  | 21.00  | 21.03  | 21.07  | 2.2%      |
| Petroleum   | 22.25  | 14.42  | 17.57  | 16.03  | 16.34  | 14.73  | 12.68  | 12.15  | 10.10  | 8.39   | 7.23   | 5.05   | 3.65   | 3.36   | 3.20   | 2.62   | 2.54   | 2.47   | 2.50   | 2.66   | 2.74   | 2.63   | -9.3%     |
| Natural Gas   | 11.26  | 16.50  | 16.86  | 19.56  | 19.99  | 23.37  | 27.16  | 31.96  | 35.69  | 39.67  | 42.35  | 48.10  | 52.18  | 58.06  | 61.69  | 63.92  | 66.50  | 66.28  | 66.31  | 66.14  | 66.51  | 66.23  | 8.4%      |
| Nuclear   | 20.69  | 29.19  | 29.33  | 29.44  | 29.46  | 29.48  | 29.50  | 24.61  | 24.89  | 24.96  | 25.03  | 25.10  | 25.11  | 21.08  | 16.86  | 16.86  | 16.86  | 16.86  | 16.86  | 16.86  | 16.86  | 16.86  | -0.9%     |
| Pumped Storage/Other 3/                                   | -0.42  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -26.7%    |
| Renewable 4/  | 11.81  | 13.29  | 13.89  | 14.23  | 14.45  | 14.66  | 14.91  | 15.26  | 15.60  | 15.94  | 16.27  | 16.50  | 16.56  | 16.60  | 16.65  | 16.81  | 17.01  | 17.05  | 17.08  | 17.11  | 17.14  | 17.16  | 1.7%      |
| Total Generation  | 78.74  | 93.31  | 97.61  | 99.34  | 100.46 | 102.59 | 104.64 | 104.47 | 106.77 | 109.45 | 111.36 | 115.32 | 118.10 | 119.83 | 119.24 | 121.09 | 123.82 | 123.62 | 123.75 | 123.77 | 124.28 | 123.96 | 2.1%      |
| Sales to Customers  | 77.30  | 91.87  | 96.17  | 97.90  | 99.02  | 101.15 | 103.20 | 103.04 | 105.34 | 108.02 | 109.93 | 113.90 | 116.68 | 118.40 | 117.81 | 119.67 | 122.40 | 122.20 | 122.33 | 122.35 | 122.86 | 122.53 | 2.1%      |
| Generation for Own Use                                    | 1.44   | 1.44   | 1.44   | 1.44   | 1.44   | 1.44   | 1.44   | 1.43   | 1.43   | 1.43   | 1.43   | 1.43   | 1.43   | 1.43   | 1.43   | 1.42   | 1.42   | 1.42   | 1.42   | 1.42   | 1.42   | 1.42   | -0.1%     |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 2.85   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.19   | 2.18   | 2.18   | 2.18   | 2.18   | 2.18   | 2.18   | -1.2%     |
| Petroleum   | 0.69   | 0.85   | 0.85   | 0.85   | 0.85   | 0.85   | 0.86   | 0.86   | 0.86   | 0.87   | 0.87   | 0.87   | 0.88   | 0.88   | 0.89   | 0.89   | 0.90   | 0.90   | 0.91   | 0.92   | 0.92   | 0.93   | 1.3%      |
| Natural Gas   | 7.23   | 7.01   | 7.01   | 7.01   | 7.02   | 7.02   | 7.02   | 7.02   | 7.03   | 7.03   | 7.03   | 7.04   | 7.04   | 7.04   | 7.05   | 7.05   | 7.06   | 7.06   | 7.07   | 7.07   | 7.08   | 7.08   | -0.1%     |
| Other Gaseous Fuels                                       | 0.59   | 1.09   | 1.09   | 1.09   | 1.10   | 1.10   | 1.12   | 1.13   | 1.13   | 1.16   | 1.16   | 1.18   | 1.20   | 1.22   | 1.23   | 1.27   | 1.28   | 1.30   | 1.33   | 1.35   | 1.37   | 1.38   | 4.0%      |
| Renewable   | 5.14   | 5.72   | 5.82   | 5.91   | 6.02   | 6.12   | 6.22   | 6.29   | 6.37   | 6.44   | 6.50   | 6.57   | 6.62   | 6.68   | 6.75   | 6.83   | 6.92   | 6.97   | 7.02   | 7.08   | 7.14   | 7.21   | 1.6%      |
| Other   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Total   | 16.50  | 16.85  | 16.96  | 17.05  | 17.17  | 17.28  | 17.40  | 17.49  | 17.57  | 17.68  | 17.75  | 17.84  | 17.92  | 18.00  | 18.10  | 18.23  | 18.34  | 18.42  | 18.52  | 18.60  | 18.69  | 18.78  | 0.6%      |
| Sales to Utilities  | 9.71   | 8.71   | 8.72   | 8.76   | 8.80   | 8.84   | 8.89   | 8.93   | 8.97   | 9.02   | 9.06   | 9.11   | 9.15   | 9.20   | 9.25   | 9.31   | 9.36   | 9.41   | 9.47   | 9.52   | 9.57   | 9.63   | 0.0%      |
| Generation for Own Use                                    | 6.79   | 8.14   | 8.24   | 8.29   | 8.37   | 8.44   | 8.51   | 8.56   | 8.60   | 8.66   | 8.69   | 8.74   | 8.77   | 8.80   | 8.84   | 8.92   | 8.98   | 9.01   | 9.06   | 9.08   | 9.12   | 9.16   | 1.4%      |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 11.3   | 11.0   | 11.0   | 10.8   | 10.9   | 10.8   | 10.5   | 10.7   | 10.6   | 10.4   | 10.2   | 10.3   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | -0.5%     |
| Commercial  | 9.9    | 9.3    | 9.3    | 9.1    | 9.4    | 9.2    | 8.8    | 8.9    | 8.6    | 8.2    | 7.9    | 7.9    | 7.6    | 7.6    | 7.6    | 7.5    | 7.4    | 7.4    | 7.4    | 7.5    | 7.5    | 7.5    | -1.3%     |
| Industrial  | 7.5    | 7.2    | 7.1    | 6.9    | 7.1    | 6.8    | 6.6    | 6.7    | 6.4    | 6.1    | 5.9    | 5.8    | 5.6    | 5.6    | 5.6    | 5.5    | 5.5    | 5.5    | 5.5    | 5.5    | 5.6    | 5.6    | -1.3%     |
| Transportation  | 8.2    | 7.5    | 7.5    | 7.4    | 7.2    | 7.0    | 6.9    | 7.0    | 7.0    | 6.9    | 6.8    | 6.8    | 6.7    | 6.7    | 6.7    | 6.7    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | -0.8%     |
| All Sectors Average                                       | 9.9    | 9.5    | 9.5    | 9.3    | 9.4    | 9.2    | 9.0    | 9.1    | 8.8    | 8.6    | 8.3    | 8.3    | 8.1    | 8.1    | 8.1    | 8.0    | 8.0    | 8.0    | 8.1    | 8.1    | 8.1    | 8.1    | -0.9%     |

**Table 66. Electric Power Projections for EMM Region (3 of 3)  
07 - Northeast Power Coordinating Council/New England**

|                                       | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-<br>2020 |       |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| Fuel Consumption (quadrillion Btu) 8/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |       |
| Coal                                  | 0.13  | 0.20  | 0.20  | 0.20  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 0.21  | 2.2%          |       |
| Natural Gas                           | 0.20  | 0.15  | 0.16  | 0.17  | 0.17  | 0.19  | 0.22  | 0.28  | 0.32  | 0.35  | 0.37  | 0.41  | 0.43  | 0.47  | 0.50  | 0.51  | 0.52  | 0.52  | 0.52  | 0.52  | 0.52  | 0.52  | 4.5%          |       |
| Oil                                   | 0.23  | 0.16  | 0.19  | 0.18  | 0.18  | 0.16  | 0.14  | 0.13  | 0.11  | 0.09  | 0.08  | 0.05  | 0.04  | 0.04  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | -9.3%         |       |
| Total                                 | 0.56  | 0.51  | 0.55  | 0.55  | 0.55  | 0.56  | 0.57  | 0.62  | 0.64  | 0.65  | 0.65  | 0.68  | 0.68  | 0.71  | 0.74  | 0.75  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 1.4%          |       |
| Emissions(million short tons) 9/      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |       |
| Carbon Dioxide                        | 47.93 | 43.12 | 46.39 | 46.01 | 46.09 | 45.89 | 46.04 | 48.67 | 49.10 | 49.34 | 49.20 | 49.96 | 49.77 | 51.73 | 53.22 | 53.34 | 54.30 | 54.15 | 54.25 | 54.29 | 54.52 | 54.31 | 0.6%          |       |
| Sulfur Dioxide                        | 0.25  | 0.20  | 0.17  | 0.17  | 0.18  | 0.18  | 0.17  | 0.17  | 0.16  | 0.15  | 0.16  | 0.14  | 0.13  | 0.14  | 0.14  | 0.14  | 0.14  | 0.15  | 0.14  | 0.15  | 0.15  | 0.13  | 0.13          | -3.0% |
| Nitrogen Oxide                        | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10          | 0.9%  |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatthour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 67. Electric Power Projections for EMM Region (1 of 3)  
08 - Southeastern Electric Reliability Council/Florida**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 9.46         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.74         | 9.75         | 9.76         | 9.78         | 9.82         | 9.90         | 9.97         | 10.07        | 0.3%        |
| Other Fossil Steam 2/                                    | 14.27        | 13.79        | 13.79        | 13.79        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | 12.02        | -0.8%       |
| Combined Cycle   | 4.42         | 4.47         | 4.47         | 5.03         | 5.48         | 6.47         | 7.99         | 9.27         | 10.01        | 10.88        | 11.44        | 12.13        | 12.83        | 14.02        | 15.26        | 16.47        | 17.07        | 17.91        | 18.88        | 19.44        | 19.85        | 20.24        | 7.2%        |
| Combustion Turbine/Diesel                                | 5.52         | 5.70         | 5.71         | 5.71         | 6.30         | 6.18         | 6.11         | 6.14         | 6.46         | 6.55         | 6.69         | 6.57         | 6.92         | 7.13         | 7.32         | 7.78         | 7.88         | 7.95         | 8.17         | 8.21         | 8.38         | 8.51         | 2.0%        |
| Nuclear Power  | 3.89         | 3.89         | 3.89         | 3.89         | 3.89         | 3.89         | 3.89         | 3.06         | 3.06         | 3.06         | 3.06         | 3.06         | 3.06         | 2.37         | 1.68         | 1.68         | 1.68         | 0.84         | 0.84         | 0.84         | 0.84         | 0.84         | -6.7%       |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.54         | 0.54         | 0.60         | 0.61         | 0.62         | 0.62         | 0.63         | 0.64         | 0.65         | 0.66         | 0.66         | 0.67         | 0.68         | 0.68         | 0.69         | 0.69         | 0.70         | 0.71         | 0.71         | 0.72         | 0.73         | 0.74         | 1.4%        |
| <b>Total Capability</b>                                  | <b>38.10</b> | <b>38.14</b> | <b>38.20</b> | <b>38.77</b> | <b>38.04</b> | <b>38.92</b> | <b>40.38</b> | <b>40.87</b> | <b>41.95</b> | <b>42.91</b> | <b>43.63</b> | <b>44.19</b> | <b>45.25</b> | <b>45.96</b> | <b>46.70</b> | <b>48.40</b> | <b>49.12</b> | <b>49.21</b> | <b>50.45</b> | <b>51.13</b> | <b>51.78</b> | <b>52.43</b> | <b>1.5%</b> |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | 0.46         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.46</b>  | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.02         | 0.03         | 0.04         | 0.08         | 0.16         | 0.23         | 0.33         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.10         | 0.55         | 1.50         | 3.03         | 4.31         | 5.05         | 5.92         | 6.48         | 7.17         | 7.87         | 9.05         | 10.29        | 11.51        | 12.11        | 12.95        | 13.92        | 14.48        | 14.89        | 15.28        | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.01         | 0.60         | 0.63         | 0.65         | 0.67         | 0.99         | 1.11         | 1.25         | 1.39         | 1.85         | 2.06         | 2.25         | 2.71         | 2.81         | 2.88         | 3.10         | 3.14         | 3.31         | 3.45         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.06         | 0.07         | 0.07         | 0.08         | 0.09         | 0.10         | 0.11         | 0.12         | 0.12         | 0.13         | 0.13         | 0.14         | 0.14         | 0.15         | 0.16         | 0.17         | 0.17         | 0.18         | 0.18         | 0.20         | N/A         |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.00</b>  | <b>0.06</b>  | <b>0.19</b>  | <b>1.22</b>  | <b>2.22</b>  | <b>3.76</b>  | <b>5.08</b>  | <b>6.15</b>  | <b>7.14</b>  | <b>7.86</b>  | <b>8.69</b>  | <b>9.85</b>  | <b>11.26</b> | <b>12.69</b> | <b>14.39</b> | <b>15.11</b> | <b>16.04</b> | <b>17.28</b> | <b>17.96</b> | <b>18.61</b> | <b>19.25</b> | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.00</b>  | <b>0.06</b>  | <b>0.64</b>  | <b>1.68</b>  | <b>2.67</b>  | <b>4.22</b>  | <b>5.53</b>  | <b>6.61</b>  | <b>7.60</b>  | <b>8.31</b>  | <b>9.15</b>  | <b>10.31</b> | <b>11.71</b> | <b>13.15</b> | <b>14.85</b> | <b>15.56</b> | <b>16.49</b> | <b>17.73</b> | <b>18.41</b> | <b>19.07</b> | <b>19.71</b> | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.32</b>  | <b>1.48</b>  | <b>1.49</b>  | <b>3.26</b>  | <b>3.40</b>  | <b>3.48</b>  | <b>4.31</b>  | <b>4.31</b>  | <b>4.34</b>  | <b>4.34</b>  | <b>4.60</b>  | <b>4.71</b>  | <b>5.40</b>  | <b>6.09</b>  | <b>6.09</b>  | <b>6.09</b>  | <b>6.93</b>  | <b>6.93</b>  | <b>6.93</b>  | <b>6.93</b>  | <b>6.93</b>  | <b>N/A</b>  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal   | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | 0.69         | N/A         |
| Petroleum  | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.1%        |
| Natural Gas  | 1.16         | 1.17         | 1.17         | 1.17         | 1.18         | 1.18         | 1.18         | 1.19         | 1.19         | 1.20         | 1.20         | 1.20         | 1.21         | 1.21         | 1.22         | 1.22         | 1.23         | 1.23         | 1.24         | 1.25         | 1.25         | 1.26         | 0.4%        |
| Other Gaseous Fuels                                      | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 3.7%        |
| Renewables   | 0.50         | 0.50         | 0.51         | 0.52         | 0.54         | 0.55         | 0.56         | 0.57         | 0.58         | 0.59         | 0.60         | 0.61         | 0.61         | 0.62         | 0.63         | 0.64         | 0.65         | 0.65         | 0.66         | 0.67         | 0.68         | 0.68         | 1.5%        |
| Other  | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 3.0%        |
| <b>Total</b>   | <b>2.38</b>  | <b>2.40</b>  | <b>2.42</b>  | <b>2.43</b>  | <b>2.45</b>  | <b>2.46</b>  | <b>2.48</b>  | <b>2.49</b>  | <b>2.51</b>  | <b>2.52</b>  | <b>2.53</b>  | <b>2.55</b>  | <b>2.56</b>  | <b>2.57</b>  | <b>2.58</b>  | <b>2.60</b>  | <b>2.62</b>  | <b>2.63</b>  | <b>2.65</b>  | <b>2.66</b>  | <b>2.67</b>  | <b>2.69</b>  | <b>0.5%</b> |

**Table 67. Electric Power Projections for EMM Region (2 of 3)  
08 - Southeastern Electric Reliability Council/Florida**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Residential   | 84.49  | 85.67  | 87.57  | 89.32  | 91.17  | 93.03  | 94.82  | 96.49  | 98.22  | 100.12 | 102.05 | 103.82 | 105.37 | 106.93 | 108.50 | 110.00 | 111.61 | 113.02 | 114.52 | 115.96 | 117.58 | 119.22 | 1.6%      |  |
| Commercial/Other  | 72.14  | 75.65  | 77.29  | 78.79  | 80.19  | 81.62  | 83.13  | 84.49  | 85.86  | 87.43  | 89.03  | 90.37  | 92.01  | 93.46  | 94.66  | 95.63  | 96.51  | 97.29  | 98.03  | 98.57  | 99.18  | 99.60  | 1.5%      |  |
| Industrial  | 17.08  | 14.15  | 14.17  | 14.42  | 14.78  | 15.07  | 15.38  | 15.62  | 15.85  | 16.08  | 16.24  | 16.45  | 16.65  | 16.91  | 17.22  | 17.52  | 17.82  | 18.01  | 18.26  | 18.49  | 18.76  | 19.03  | 0.5%      |  |
| Transportation  | 0.84   | 0.88   | 0.90   | 0.93   | 1.03   | 1.13   | 1.23   | 1.32   | 1.40   | 1.48   | 1.56   | 1.64   | 1.72   | 1.80   | 1.88   | 1.96   | 2.01   | 2.01   | 2.00   | 1.99   | 1.97   | 1.95   | 3.9%      |  |
| Total Sales   | 174.54 | 176.34 | 179.93 | 183.46 | 187.16 | 190.85 | 194.56 | 197.92 | 201.32 | 205.10 | 208.88 | 212.29 | 215.76 | 219.11 | 222.26 | 225.12 | 227.94 | 230.32 | 232.81 | 235.00 | 237.49 | 239.80 | 1.5%      |  |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Gross International Imports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |  |
| Gross International Exports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |  |
| Gross Interregional Elec. Imports                         | 22.40  | 28.51  | 32.42  | 35.18  | 37.40  | 36.68  | 31.99  | 29.14  | 27.95  | 27.36  | 29.15  | 28.00  | 27.56  | 26.00  | 25.59  | 20.86  | 18.40  | 19.36  | 17.60  | 16.06  | 14.45  | 13.60  | -2.2%     |  |
| Gross Interregional Elec. Exports                         | 5.56   | 0.68   | 0.02   | 0.01   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -29.6%    |  |
| Purchases from cogenerators 6/                            | 8.86   | 10.02  | 10.04  | 10.10  | 10.16  | 10.23  | 10.27  | 10.32  | 10.37  | 10.42  | 10.47  | 10.52  | 10.58  | 10.63  | 10.69  | 10.75  | 10.80  | 10.86  | 10.92  | 10.97  | 11.03  | 11.08  | 1.0%      |  |
| Util. Generation for Customers                            | 168.47 | 149.73 | 148.90 | 149.75 | 151.31 | 155.73 | 164.09 | 170.25 | 174.82 | 179.23 | 181.30 | 185.87 | 189.80 | 194.67 | 198.21 | 205.65 | 210.86 | 212.39 | 216.68 | 220.36 | 224.53 | 227.77 | 1.4%      |  |
| Total Net Energy for Load                                 | 194.17 | 187.58 | 191.35 | 195.02 | 198.88 | 202.63 | 206.35 | 209.71 | 213.15 | 217.01 | 220.92 | 224.39 | 227.93 | 231.30 | 234.48 | 237.25 | 240.06 | 242.60 | 245.20 | 247.39 | 250.00 | 252.45 | 1.2%      |  |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Coal  | 60.33  | 66.51  | 66.77  | 67.81  | 69.27  | 70.31  | 70.24  | 70.14  | 70.04  | 70.34  | 70.36  | 69.49  | 69.36  | 69.34  | 69.67  | 69.98  | 70.40  | 70.78  | 71.12  | 71.71  | 72.41  | 73.46  | 0.9%      |  |
| Petroleum   | 40.92  | 26.36  | 26.81  | 23.47  | 19.37  | 16.83  | 16.20  | 17.96  | 17.54  | 16.61  | 15.65  | 14.12  | 12.75  | 12.57  | 12.25  | 12.74  | 13.59  | 12.96  | 12.06  | 11.74  | 11.84  | 11.60  | -5.6%     |  |
| Natural Gas   | 32.61  | 24.61  | 22.47  | 25.35  | 29.68  | 35.55  | 44.58  | 53.09  | 59.58  | 64.95  | 67.29  | 74.20  | 79.58  | 87.91  | 95.98  | 105.25 | 109.22 | 115.18 | 122.09 | 125.34 | 128.58 | 131.28 | 6.5%      |  |
| Nuclear   | 31.11  | 29.10  | 29.15  | 29.18  | 29.05  | 28.92  | 28.79  | 24.58  | 23.04  | 23.04  | 23.04  | 23.04  | 20.43  | 20.43  | 15.19  | 12.56  | 12.56  | 8.37   | 6.26   | 6.28   | 6.28   | 6.28   | -7.0%     |  |
| Pumped Storage/Other 3/                                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |  |
| Renewable 4/  | 4.00   | 3.65   | 4.20   | 4.43   | 4.41   | 4.59   | 4.76   | 4.94   | 5.09   | 4.76   | 5.43   | 5.49   | 5.54   | 4.90   | 5.59   | 5.59   | 5.56   | 5.58   | 5.62   | 5.75   | 5.88   | 5.61   | 1.6%      |  |
| Total Generation  | 168.98 | 150.23 | 149.41 | 150.25 | 151.78 | 156.20 | 164.56 | 170.72 | 175.30 | 179.70 | 181.77 | 186.34 | 190.27 | 195.15 | 198.68 | 206.12 | 211.33 | 212.86 | 217.15 | 220.83 | 225.00 | 228.24 | 1.4%      |  |
| Sales to Customers  | 168.47 | 149.73 | 148.90 | 149.75 | 151.31 | 155.73 | 164.09 | 170.25 | 174.82 | 179.23 | 181.30 | 185.87 | 189.80 | 194.67 | 198.21 | 205.65 | 210.86 | 212.39 | 216.68 | 220.36 | 224.53 | 227.77 | 1.4%      |  |
| Generation for Own Use                                    | 0.50   | 0.50   | 0.50   | 0.50   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | 0.47   | -0.3%     |  |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Coal  | 4.87   | 4.68   | 4.69   | 4.71   | 4.73   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | 4.74   | -0.1%     |  |
| Petroleum   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.9%      |  |
| Natural Gas   | 5.26   | 6.62   | 6.64   | 6.65   | 6.67   | 6.69   | 6.71   | 6.73   | 6.74   | 6.77   | 6.79   | 6.81   | 6.84   | 6.87   | 6.90   | 6.93   | 6.97   | 7.00   | 7.04   | 7.08   | 7.11   | 7.13   | 1.4%      |  |
| Other Gaseous Fuels                                       | 0.02   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.03   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 4.0%      |  |
| Renewable   | 3.09   | 2.67   | 2.73   | 2.79   | 2.85   | 2.91   | 2.97   | 3.01   | 3.06   | 3.10   | 3.14   | 3.18   | 3.21   | 3.24   | 3.28   | 3.33   | 3.38   | 3.42   | 3.45   | 3.48   | 3.52   | 3.56   | 0.6%      |  |
| Other   | 3.34   | 3.51   | 3.51   | 3.51   | 3.51   | 3.51   | 3.52   | 3.52   | 3.52   | 3.53   | 3.53   | 3.54   | 3.55   | 3.55   | 3.56   | 3.57   | 3.58   | 3.59   | 3.60   | 3.60   | 3.61   | 3.62   | 0.4%      |  |
| Total   | 16.61  | 17.52  | 17.62  | 17.71  | 17.81  | 17.90  | 17.99  | 18.05  | 18.12  | 18.20  | 18.26  | 18.33  | 18.40  | 18.46  | 18.54  | 18.64  | 18.73  | 18.81  | 18.89  | 18.96  | 19.04  | 19.11  | 0.6%      |  |
| Sales to Utilities  | 8.86   | 10.02  | 10.04  | 10.10  | 10.16  | 10.23  | 10.27  | 10.32  | 10.37  | 10.42  | 10.47  | 10.52  | 10.58  | 10.63  | 10.69  | 10.75  | 10.80  | 10.86  | 10.92  | 10.97  | 11.03  | 11.08  | 1.0%      |  |
| Generation for Own Use                                    | 7.75   | 7.51   | 7.58   | 7.61   | 7.65   | 7.68   | 7.71   | 7.73   | 7.75   | 7.78   | 7.78   | 7.81   | 7.82   | 7.83   | 7.85   | 7.89   | 7.93   | 7.95   | 7.97   | 7.99   | 8.01   | 8.03   | 0.2%      |  |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Residential   | 7.7    | 7.9    | 7.7    | 7.7    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 7.5    | 7.5    | 7.5    | 7.5    | 7.6    | 7.6    | 7.6    | 7.6    | 7.5    | 7.5    | 7.4    | -0.1%     |  |
| Commercial  | 6.0    | 6.3    | 6.2    | 6.1    | 6.0    | 6.0    | 5.9    | 5.9    | 5.9    | 5.9    | 5.8    | 5.7    | 5.7    | 5.6    | 5.6    | 5.6    | 5.5    | 5.6    | 5.5    | 5.4    | 5.3    | 5.3    | -0.6%     |  |
| Industrial  | 4.6    | 4.8    | 4.7    | 4.7    | 4.6    | 4.6    | 4.5    | 4.6    | 4.6    | 4.5    | 4.5    | 4.4    | 4.4    | 4.4    | 4.4    | 4.3    | 4.3    | 4.3    | 4.3    | 4.2    | 4.2    | 4.1    | -0.5%     |  |
| Transportation  | 4.3    | 4.2    | 4.2    | 4.2    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.0    | 4.0    | 4.0    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.8    | 3.8    | 3.8    | 3.8    | -0.6%     |  |
| All Sectors Average                                       | 6.7    | 6.9    | 6.8    | 6.7    | 6.7    | 6.7    | 6.6    | 6.6    | 6.7    | 6.6    | 6.5    | 6.5    | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 6.3    | 6.3    | -0.3%     |  |

**Table 67. Electric Power Projections for EMM Region (3 of 3)  
08 - Southeastern Electric Reliability Council/Florida**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |       |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Coal                                  | 0.62   | 0.68   | 0.68   | 0.69   | 0.71   | 0.73   | 0.73   | 0.72   | 0.72   | 0.73   | 0.73   | 0.72   | 0.72   | 0.72   | 0.72   | 0.72   | 0.73   | 0.73   | 0.73   | 0.74   | 0.74   | 0.75   | 0.9%      |       |
| Natural Gas                           | 0.31   | 0.25   | 0.22   | 0.24   | 0.28   | 0.31   | 0.37   | 0.43   | 0.47   | 0.51   | 0.52   | 0.57   | 0.60   | 0.65   | 0.70   | 0.76   | 0.78   | 0.82   | 0.86   | 0.88   | 0.91   | 0.92   | 5.0%      |       |
| Oil                                   | 0.42   | 0.27   | 0.28   | 0.24   | 0.20   | 0.17   | 0.16   | 0.18   | 0.18   | 0.17   | 0.16   | 0.14   | 0.13   | 0.13   | 0.12   | 0.13   | 0.14   | 0.13   | 0.12   | 0.12   | 0.12   | 0.12   | -5.6%     |       |
| Total                                 | 1.35   | 1.20   | 1.18   | 1.17   | 1.19   | 1.21   | 1.26   | 1.33   | 1.37   | 1.40   | 1.40   | 1.42   | 1.45   | 1.49   | 1.54   | 1.61   | 1.65   | 1.68   | 1.72   | 1.74   | 1.77   | 1.79   | 1.3%      |       |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Carbon Dioxide                        | 110.91 | 107.28 | 106.81 | 106.04 | 106.53 | 107.78 | 110.49 | 115.27 | 117.44 | 118.87 | 118.55 | 119.06 | 119.82 | 122.58 | 125.50 | 129.60 | 132.25 | 134.34 | 136.30 | 137.67 | 139.66 | 141.35 | 1.1%      |       |
| Sulfur Dioxide                        | 0.56   | 0.47   | 0.46   | 0.44   | 0.37   | 0.33   | 0.32   | 0.33   | 0.32   | 0.32   | 0.34   | 0.31   | 0.27   | 0.30   | 0.29   | 0.29   | 0.29   | 0.29   | 0.30   | 0.28   | 0.30   | 0.29   | 0.30      | -2.8% |
| Nitrogen Oxide                        | 0.27   | 0.20   | 0.20   | 0.20   | 0.20   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.22   | 0.21   | 0.21   | 0.21   | 0.22   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.24   | 0.24   | -0.6%     |       |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatthour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 68. Electric Power Projections for EMM Region (1 of 3)  
09 - Southeastern Electric Reliability Council/Excl. Florida**

|   | 1998          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 1998-2020   |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| <b>Electricity Generating Capacity 1/ (gigawatts)</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam  | 64.52         | 65.24         | 65.44         | 65.44         | 65.44         | 64.77         | 64.86         | 64.88         | 64.60         | 64.64         | 64.68         | 64.77         | 64.88         | 64.97         | 65.09         | 64.74         | 65.15         | 65.48         | 66.38         | 66.82         | 67.46         | 68.84         | 0.3%        |
| Other Fossil Steam 2/                                 | 3.11          | 3.11          | 3.11          | 3.09          | 3.09          | 3.06          | 3.06          | 3.04          | 3.04          | 2.99          | 2.99          | 2.94          | 2.94          | 2.94          | 2.94          | 2.86          | 2.86          | 2.86          | 2.78          | 2.78          | 2.66          | 2.66          | -0.7%       |
| Combined Cycle  | 1.82          | 2.17          | 2.17          | 2.32          | 2.32          | 4.59          | 5.96          | 7.87          | 9.74          | 11.99         | 14.06         | 15.57         | 16.62         | 17.61         | 18.49         | 19.63         | 20.35         | 21.57         | 22.56         | 23.47         | 23.86         | 24.20         | 12.5%       |
| Combustion Turbine/Diesel                             | 12.41         | 12.86         | 14.03         | 14.42         | 16.08         | 16.34         | 17.67         | 19.01         | 20.39         | 21.98         | 22.82         | 23.13         | 24.72         | 26.23         | 27.88         | 28.73         | 30.88         | 31.96         | 33.21         | 34.21         | 35.54         | 35.77         | 4.9%        |
| Nuclear Power   | 26.92         | 26.97         | 26.97         | 26.97         | 25.91         | 25.10         | 25.10         | 24.28         | 24.28         | 24.28         | 24.28         | 23.59         | 23.59         | 23.59         | 23.59         | 21.67         | 21.67         | 20.56         | 19.73         | 18.91         | 18.91         | 17.79         | -1.9%       |
| Pumped Storage/Other 3/                               | 6.68          | 6.68          | 6.72          | 6.76          | 6.80          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 6.84          | 0.1%        |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable 4/  | 11.57         | 11.58         | 11.69         | 11.70         | 11.71         | 11.72         | 11.73         | 11.74         | 11.75         | 11.76         | 11.77         | 11.78         | 11.79         | 11.79         | 11.80         | 11.81         | 11.81         | 11.82         | 11.84         | 11.87         | 11.90         | 11.92         | 0.1%        |
| <b>Total Capability</b>                               | <b>127.02</b> | <b>128.61</b> | <b>130.14</b> | <b>130.70</b> | <b>131.34</b> | <b>132.42</b> | <b>135.22</b> | <b>137.66</b> | <b>140.64</b> | <b>144.48</b> | <b>147.44</b> | <b>148.62</b> | <b>151.38</b> | <b>153.98</b> | <b>156.64</b> | <b>156.28</b> | <b>159.57</b> | <b>161.08</b> | <b>163.34</b> | <b>164.89</b> | <b>167.17</b> | <b>168.02</b> | <b>1.3%</b> |
| <b>Cumulative Planned Additions 5/</b>                |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam  | 0.00          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | N/A         |
| Other Fossil Steam 2/                                 | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Combined Cycle  | 0.00          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | N/A         |
| Combustion Turbine/Diesel                             | 0.00          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | 0.65          | N/A         |
| Nuclear Power   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Pumped Storage/Other 3/                               | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable 4/  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| <b>Total (planned)</b>                                | <b>0.00</b>   | <b>1.08</b>   | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>              |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.09          | 0.12          | 0.16          | 0.20          | 0.24          | 0.33          | 0.44          | 0.53          | 0.65          | 0.82          | 1.23          | 1.56          | 2.47          | 3.43          | 4.07          | 5.45          | N/A         |
| Other Fossil Steam 2/                                 | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Combined Cycle  | 0.00          | 0.00          | 0.00          | 0.15          | 0.15          | 2.50          | 3.87          | 5.77          | 7.64          | 9.90          | 11.97         | 13.48         | 14.53         | 15.51         | 16.39         | 17.53         | 18.26         | 19.48         | 20.46         | 21.37         | 21.76         | 22.10         | N/A         |
| Combustion Turbine/Diesel                             | 0.00          | 0.02          | 1.19          | 1.61          | 3.30          | 3.57          | 5.20          | 6.63          | 8.01          | 9.70          | 10.58         | 11.26         | 12.86         | 14.50         | 16.14         | 16.99         | 19.15         | 20.22         | 21.47         | 22.47         | 23.80         | 24.03         | N/A         |
| Nuclear Power   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Pumped Storage/Other 3/                               | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable 4/  | 0.00          | 0.00          | 0.12          | 0.13          | 0.13          | 0.14          | 0.15          | 0.17          | 0.18          | 0.19          | 0.19          | 0.20          | 0.21          | 0.22          | 0.22          | 0.23          | 0.24          | 0.24          | 0.27          | 0.30          | 0.32          | 0.35          | N/A         |
| <b>Total (unplanned)</b>                              | <b>0.00</b>   | <b>0.02</b>   | <b>1.31</b>   | <b>1.88</b>   | <b>3.59</b>   | <b>6.21</b>   | <b>9.31</b>   | <b>12.69</b>  | <b>15.99</b>  | <b>19.98</b>  | <b>22.98</b>  | <b>25.27</b>  | <b>28.03</b>  | <b>30.75</b>  | <b>33.41</b>  | <b>35.57</b>  | <b>38.87</b>  | <b>41.50</b>  | <b>44.67</b>  | <b>47.57</b>  | <b>49.96</b>  | <b>51.93</b>  | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                     | <b>0.00</b>   | <b>1.10</b>   | <b>2.39</b>   | <b>2.97</b>   | <b>4.67</b>   | <b>7.30</b>   | <b>10.40</b>  | <b>13.78</b>  | <b>17.08</b>  | <b>21.06</b>  | <b>24.07</b>  | <b>26.36</b>  | <b>29.11</b>  | <b>31.84</b>  | <b>34.50</b>  | <b>36.66</b>  | <b>39.95</b>  | <b>42.58</b>  | <b>45.75</b>  | <b>48.65</b>  | <b>51.05</b>  | <b>53.02</b>  | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                         | <b>0.00</b>   | <b>0.00</b>   | <b>1.19</b>   | <b>1.25</b>   | <b>2.35</b>   | <b>3.93</b>   | <b>4.24</b>   | <b>5.17</b>   | <b>5.48</b>   | <b>5.62</b>   | <b>5.67</b>   | <b>6.78</b>   | <b>6.78</b>   | <b>6.90</b>   | <b>6.90</b>   | <b>9.42</b>   | <b>9.42</b>   | <b>10.54</b>  | <b>11.45</b>  | <b>12.80</b>  | <b>12.92</b>  | <b>14.04</b>  | <b>N/A</b>  |
| <b>Cogenerators 6/ Capacity</b>                       |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal  | 1.72          | 1.72          | 1.72          | 1.72          | 1.72          | 1.72          | 1.72          | 1.72          | 1.72          | 1.72          | 1.72          | 1.72          | 1.71          | 1.71          | 1.71          | 1.71          | 1.71          | 1.71          | 1.71          | 1.71          | 1.71          | 1.71          | 0.0%        |
| Petroleum   | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.33          | 0.1%        |
| Natural Gas   | 1.52          | 1.53          | 1.54          | 1.54          | 1.55          | 1.55          | 1.56          | 1.56          | 1.57          | 1.57          | 1.58          | 1.59          | 1.59          | 1.60          | 1.61          | 1.62          | 1.62          | 1.63          | 1.64          | 1.65          | 1.66          | 1.67          | 0.4%        |
| Other Gaseous Fuels                                   | 0.15          | 0.25          | 0.25          | 0.25          | 0.25          | 0.25          | 0.26          | 0.26          | 0.26          | 0.27          | 0.27          | 0.27          | 0.28          | 0.28          | 0.28          | 0.29          | 0.30          | 0.30          | 0.31          | 0.31          | 0.32          | 0.33          | 3.7%        |
| Renewables  | 3.06          | 3.09          | 3.16          | 3.22          | 3.29          | 3.36          | 3.43          | 3.48          | 3.54          | 3.60          | 3.64          | 3.70          | 3.73          | 3.77          | 3.81          | 3.87          | 3.93          | 3.97          | 4.01          | 4.05          | 4.10          | 4.15          | 1.4%        |
| Other   | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.01          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          | 3.0%        |
| <b>Total</b>  | <b>6.78</b>   | <b>6.93</b>   | <b>7.00</b>   | <b>7.07</b>   | <b>7.15</b>   | <b>7.22</b>   | <b>7.30</b>   | <b>7.36</b>   | <b>7.43</b>   | <b>7.49</b>   | <b>7.55</b>   | <b>7.61</b>   | <b>7.66</b>   | <b>7.71</b>   | <b>7.76</b>   | <b>7.84</b>   | <b>7.92</b>   | <b>7.97</b>   | <b>8.03</b>   | <b>8.08</b>   | <b>8.14</b>   | <b>8.21</b>   | <b>0.9%</b> |

**Table 68. Electric Power Projections for EMM Region (2 of 3)  
09 - Southeastern Electric Reliability Council/Excl. Florida**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 213.08 | 216.38 | 220.49 | 224.25 | 228.26 | 232.22 | 236.03 | 239.57 | 243.23 | 247.25 | 251.39 | 255.14 | 258.51 | 261.89 | 265.29 | 268.61 | 272.01 | 275.05 | 278.16 | 281.16 | 284.71 | 288.24 | 1.4%      |
| Commercial/Other  | 153.58 | 156.61 | 160.20 | 163.47 | 166.55 | 169.71 | 173.08 | 176.15 | 179.17 | 182.59 | 186.13 | 189.10 | 192.72 | 195.91 | 198.57 | 200.77 | 202.61 | 204.32 | 205.86 | 206.98 | 208.29 | 209.19 | 1.4%      |
| Industrial  | 203.86 | 199.36 | 199.59 | 203.22 | 208.22 | 212.28 | 216.72 | 220.02 | 223.40 | 226.54 | 228.79 | 231.74 | 234.46 | 238.13 | 242.37 | 246.66 | 250.82 | 253.57 | 257.00 | 260.21 | 263.99 | 267.83 | 1.2%      |
| Transportation  | 2.72   | 2.76   | 2.84   | 2.91   | 3.24   | 3.55   | 3.85   | 4.11   | 4.35   | 4.59   | 4.84   | 5.09   | 5.33   | 5.57   | 5.81   | 6.04   | 6.17   | 6.15   | 6.12   | 6.07   | 6.00   | 5.93   | 3.6%      |
| Total Sales   | 573.25 | 575.12 | 583.12 | 593.85 | 606.27 | 617.76 | 629.68 | 639.85 | 650.15 | 660.98 | 671.15 | 681.07 | 691.02 | 701.50 | 712.05 | 722.07 | 731.62 | 739.09 | 747.14 | 754.43 | 762.99 | 771.18 | 1.4%      |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Gross International Exports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Gross Interregional Elec. Imports                         | 42.71  | 34.92  | 32.72  | 33.81  | 31.65  | 27.59  | 26.84  | 24.41  | 23.89  | 21.89  | 21.69  | 21.89  | 22.51  | 22.49  | 21.32  | 22.09  | 22.24  | 22.58  | 21.54  | 20.08  | 22.11  | 21.58  | -3.1%     |
| Gross Interregional Elec. Exports                         | 60.68  | 77.63  | 80.53  | 78.62  | 79.08  | 79.39  | 74.05  | 69.88  | 69.50  | 67.76  | 69.69  | 65.28  | 62.69  | 60.14  | 57.31  | 53.45  | 49.09  | 47.97  | 43.85  | 40.62  | 38.56  | 38.09  | -2.1%     |
| Purchases from cogenerators 6/                            | 6.22   | 7.05   | 7.12   | 7.35   | 7.58   | 7.81   | 8.00   | 8.19   | 8.37   | 8.54   | 8.75   | 8.93   | 9.15   | 9.35   | 9.57   | 9.80   | 10.03  | 10.25  | 10.47  | 10.69  | 10.92  | 11.15  | 2.7%      |
| Util. Generation for Customers                            | 630.28 | 645.31 | 658.40 | 666.31 | 681.44 | 697.27 | 704.81 | 713.25 | 723.66 | 734.62 | 746.80 | 752.13 | 758.84 | 766.81 | 775.58 | 780.88 | 785.81 | 792.02 | 797.22 | 802.91 | 807.67 | 816.18 | 1.2%      |
| Total Net Energy for Load                                 | 618.52 | 609.65 | 617.70 | 628.85 | 641.59 | 653.27 | 665.60 | 675.97 | 686.42 | 697.29 | 707.56 | 717.68 | 727.81 | 738.51 | 749.16 | 759.31 | 769.00 | 776.88 | 785.38 | 793.06 | 802.14 | 810.82 | 1.2%      |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 372.53 | 397.19 | 411.52 | 421.04 | 436.19 | 441.78 | 445.52 | 449.49 | 451.62 | 452.56 | 456.96 | 452.00 | 453.50 | 455.53 | 458.44 | 458.72 | 465.22 | 468.45 | 476.67 | 482.46 | 488.25 | 498.71 | 1.3%      |
| Petroleum   | 6.05   | 3.16   | 2.31   | 1.81   | 1.77   | 1.26   | 1.42   | 1.44   | 1.51   | 1.17   | 1.08   | 0.98   | 1.02   | 0.95   | 0.86   | 1.22   | 1.56   | 1.18   | 1.09   | 1.43   | 1.31   | 1.30   | -6.8%     |
| Natural Gas   | 12.04  | 19.54  | 17.19  | 15.89  | 16.13  | 25.05  | 33.10  | 42.09  | 52.26  | 63.09  | 71.02  | 82.73  | 92.12  | 97.92  | 104.99 | 114.53 | 123.73 | 128.91 | 133.69 | 140.57 | 143.76 | 143.38 | 11.9%     |
| Nuclear   | 204.12 | 190.37 | 190.84 | 191.19 | 191.32 | 191.37 | 185.96 | 181.83 | 179.62 | 179.36 | 179.16 | 177.14 | 173.52 | 173.22 | 172.82 | 168.52 | 157.68 | 155.04 | 147.14 | 140.58 | 136.27 | 134.57 | -1.9%     |
| Pumped Storage/Other 3/                                   | -1.99  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -10.8%    |
| Renewable 4/  | 37.95  | 35.65  | 37.13  | 36.96  | 36.61  | 38.39  | 39.40  | 38.98  | 39.21  | 39.01  | 39.16  | 39.85  | 39.26  | 39.77  | 39.05  | 38.46  | 38.19  | 39.01  | 39.21  | 38.44  | 38.66  | 38.80  | 0.1%      |
| Total Generation  | 630.70 | 645.74 | 658.82 | 666.73 | 681.87 | 697.69 | 705.23 | 713.67 | 724.07 | 735.03 | 747.21 | 752.54 | 759.25 | 767.22 | 775.99 | 781.28 | 786.22 | 792.43 | 797.63 | 803.32 | 808.08 | 816.59 | 1.2%      |
| Sales to Customers  | 630.28 | 645.31 | 658.40 | 666.31 | 681.44 | 697.27 | 704.81 | 713.25 | 723.66 | 734.62 | 746.80 | 752.13 | 758.84 | 766.81 | 775.58 | 780.88 | 785.81 | 792.02 | 797.22 | 802.91 | 807.67 | 816.18 | 1.2%      |
| Generation for Own Use                                    | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.42   | 0.42   | 0.42   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | 0.41   | -0.2%     |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 7.92   | 8.11   | 8.14   | 8.21   | 8.25   | 8.30   | 8.30   | 8.29   | 8.29   | 8.27   | 8.29   | 8.27   | 8.28   | 8.28   | 8.28   | 8.28   | 8.28   | 8.28   | 8.28   | 8.27   | 8.27   | 8.27   | 0.2%      |
| Petroleum   | 0.77   | 0.90   | 0.90   | 0.90   | 0.91   | 0.91   | 0.91   | 0.91   | 0.91   | 0.92   | 0.92   | 0.93   | 0.94   | 0.94   | 0.95   | 0.96   | 0.96   | 0.97   | 0.98   | 0.98   | 0.99   | 1.00   | 1.2%      |
| Natural Gas   | 2.27   | 2.77   | 2.79   | 2.81   | 2.83   | 2.85   | 2.87   | 2.89   | 2.91   | 2.94   | 2.96   | 2.99   | 3.02   | 3.05   | 3.08   | 3.12   | 3.16   | 3.20   | 3.25   | 3.28   | 3.32   | 3.35   | 1.8%      |
| Other Gaseous Fuels                                       | 0.67   | 1.25   | 1.25   | 1.25   | 1.26   | 1.27   | 1.28   | 1.29   | 1.29   | 1.33   | 1.33   | 1.35   | 1.38   | 1.40   | 1.41   | 1.45   | 1.47   | 1.49   | 1.53   | 1.55   | 1.57   | 1.58   | 4.0%      |
| Renewable   | 20.04  | 18.66  | 19.08  | 19.45  | 19.88  | 20.27  | 20.67  | 20.98  | 21.28  | 21.58  | 21.82  | 22.11  | 22.28  | 22.51  | 22.80  | 23.14  | 23.48  | 23.70  | 23.91  | 24.13  | 24.38  | 24.66  | 0.9%      |
| Other   | 0.86   | 0.90   | 0.90   | 0.90   | 0.90   | 0.90   | 0.90   | 0.90   | 0.90   | 0.90   | 0.91   | 0.91   | 0.91   | 0.91   | 0.91   | 0.92   | 0.92   | 0.92   | 0.92   | 0.92   | 0.92   | 0.93   | 0.4%      |
| Total   | 32.53  | 32.59  | 33.06  | 33.52  | 34.02  | 34.48  | 34.93  | 35.27  | 35.59  | 35.94  | 36.23  | 36.55  | 36.81  | 37.10  | 37.43  | 37.87  | 38.27  | 38.56  | 38.87  | 39.14  | 39.46  | 39.79  | 0.9%      |
| Sales to Utilities  | 6.22   | 7.05   | 7.12   | 7.35   | 7.58   | 7.81   | 8.00   | 8.19   | 8.37   | 8.54   | 8.75   | 8.93   | 9.15   | 9.35   | 9.57   | 9.80   | 10.03  | 10.25  | 10.47  | 10.69  | 10.92  | 11.15  | 2.7%      |
| Generation for Own Use                                    | 26.32  | 25.53  | 25.94  | 26.17  | 26.44  | 26.68  | 26.93  | 27.08  | 27.22  | 27.40  | 27.48  | 27.62  | 27.67  | 27.75  | 27.87  | 28.06  | 28.24  | 28.31  | 28.40  | 28.45  | 28.54  | 28.64  | 0.4%      |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 7.1    | 7.0    | 6.9    | 6.8    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.8    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.8    | 6.7    | 6.7    | -0.2%     |
| Commercial  | 6.2    | 6.1    | 6.0    | 5.9    | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 5.7    | 5.7    | 5.7    | 5.7    | 5.7    | 5.7    | 5.8    | 5.8    | 5.8    | 5.8    | -0.3%     |
| Industrial  | 4.0    | 4.0    | 3.9    | 3.9    | 3.8    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.6    | 3.6    | 3.6    | 3.6    | 3.5    | 3.5    | 3.5    | 3.6    | 3.5    | 3.6    | -0.5%     |
| Transportation  | 4.6    | 4.8    | 4.7    | 4.7    | 4.6    | 4.6    | 4.5    | 4.5    | 4.4    | 4.4    | 4.4    | 4.4    | 4.3    | 4.2    | 4.2    | 4.2    | 4.2    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | -0.6%     |
| All Sectors Average                                       | 5.7    | 5.7    | 5.6    | 5.5    | 5.5    | 5.4    | 5.4    | 5.4    | 5.4    | 5.4    | 5.4    | 5.4    | 5.4    | 5.3    | 5.3    | 5.3    | 5.3    | 5.3    | 5.3    | 5.4    | 5.4    | 5.4    | -0.3%     |

**Table 68. Electric Power Projections for EMM Region (3 of 3)  
09 - Southeastern Electric Reliability Council/Excl. Florida**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-<br>2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Coal                                  | 3.73   | 4.00   | 4.15   | 4.25   | 4.40   | 4.46   | 4.50   | 4.54   | 4.56   | 4.57   | 4.62   | 4.56   | 4.57   | 4.60   | 4.62   | 4.62   | 4.68   | 4.71   | 4.78   | 4.82   | 4.87   | 4.95   | 1.3%          |
| Natural Gas                           | 0.15   | 0.20   | 0.18   | 0.16   | 0.16   | 0.22   | 0.29   | 0.35   | 0.42   | 0.49   | 0.54   | 0.62   | 0.69   | 0.73   | 0.78   | 0.85   | 0.91   | 0.94   | 0.97   | 1.02   | 1.04   | 1.03   | 9.1%          |
| Oil                                   | 0.06   | 0.03   | 0.02   | 0.02   | 0.02   | 0.01   | 0.02   | 0.02   | 0.02   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.02   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | -6.6%         |
| Total                                 | 3.94   | 4.24   | 4.35   | 4.43   | 4.59   | 4.70   | 4.80   | 4.91   | 5.00   | 5.08   | 5.17   | 5.20   | 5.28   | 5.33   | 5.41   | 5.48   | 5.61   | 5.67   | 5.76   | 5.85   | 5.92   | 5.99   | 1.9%          |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Carbon Dioxide                        | 397.00 | 424.82 | 438.15 | 447.06 | 463.06 | 472.34 | 480.29 | 488.64 | 494.87 | 499.65 | 507.53 | 506.17 | 511.59 | 515.84 | 521.54 | 525.75 | 536.13 | 540.60 | 549.22 | 556.50 | 562.90 | 570.20 | 1.7%          |
| Sulfur Dioxide                        | 3.28   | 2.89   | 3.19   | 3.28   | 3.69   | 3.48   | 3.25   | 2.98   | 2.86   | 2.86   | 3.00   | 2.73   | 2.62   | 2.57   | 2.53   | 2.53   | 2.43   | 2.41   | 2.48   | 2.49   | 2.54   | 2.44   | -1.3%         |
| Nitrogen Oxide                        | 0.98   | 0.98   | 1.01   | 1.03   | 1.07   | 1.06   | 1.08   | 1.08   | 1.09   | 1.10   | 1.11   | 1.10   | 1.11   | 1.11   | 1.12   | 1.12   | 1.14   | 1.14   | 1.15   | 1.15   | 1.15   | 1.16   | 0.7%          |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatthour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 69. Electric Power Projections for EMM Region (1 of 3)  
10 - Southwest Power Pool**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 27.53        | 27.53        | 27.53        | 27.53        | 27.53        | 27.04        | 27.04        | 27.04        | 26.51        | 26.03        | 26.03        | 26.03        | 26.00        | 25.98        | 25.99        | 26.00        | 26.03        | 26.06        | 26.04        | 26.11        | 26.19        | 26.19        | -0.2%       |
| Other Fossil Steam 2/                                    | 30.58        | 30.58        | 30.50        | 30.42        | 29.36        | 28.49        | 27.53        | 26.92        | 26.61        | 26.58        | 26.58        | 26.58        | 26.58        | 26.58        | 26.34        | 26.34        | 26.34        | 26.34        | 26.34        | 26.34        | 26.34        | 26.34        | -0.7%       |
| Combined Cycle   | 1.30         | 1.74         | 2.16         | 3.50         | 3.50         | 4.58         | 5.48         | 6.29         | 7.26         | 8.19         | 9.20         | 9.68         | 10.09        | 10.40        | 11.20        | 12.08        | 13.10        | 14.19        | 14.91        | 15.50        | 16.35        | 16.72        | 12.3%       |
| Combustion Turbine/Diesel                                | 5.19         | 5.40         | 6.07         | 6.07         | 7.39         | 7.87         | 9.01         | 9.19         | 10.16        | 11.25        | 11.67        | 12.21        | 12.99        | 13.90        | 14.58        | 15.22        | 16.28        | 16.80        | 17.63        | 18.05        | 18.63        | 18.86        | 6.0%        |
| Nuclear Power  | 5.95         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 6.03         | 5.20         | 4.26         | 4.26         | 4.26         | 3.40         | 3.40         | 3.40         | -2.5%       |
| Pumped Storage/Other 3/                                  | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | 0.50         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 2.84         | 2.84         | 2.92         | 2.92         | 2.93         | 2.93         | 2.95         | 2.95         | 2.96         | 2.97         | 2.98         | 2.99         | 3.00         | 3.01         | 3.02         | 3.03         | 3.04         | 3.04         | 3.05         | 3.06         | 3.06         | 3.07         | 0.3%        |
| <b>Total Capability</b>                                  | <b>73.90</b> | <b>74.63</b> | <b>75.72</b> | <b>76.98</b> | <b>77.24</b> | <b>77.46</b> | <b>78.54</b> | <b>78.94</b> | <b>80.04</b> | <b>81.58</b> | <b>83.02</b> | <b>84.04</b> | <b>85.19</b> | <b>86.44</b> | <b>87.90</b> | <b>88.36</b> | <b>89.52</b> | <b>91.17</b> | <b>92.76</b> | <b>92.90</b> | <b>94.40</b> | <b>95.09</b> | <b>1.2%</b> |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | 0.44         | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | 0.17         | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.61</b>  | <b>N/A</b>  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.04         | 0.07         | 0.10         | 0.14         | 0.21         | 0.29         | N/A         |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Combined Cycle   | 0.00         | 0.00         | 0.42         | 1.76         | 1.76         | 2.84         | 3.74         | 4.56         | 5.52         | 6.46         | 7.46         | 7.94         | 8.35         | 8.66         | 9.46         | 10.34        | 11.36        | 12.45        | 13.17        | 13.76        | 14.61        | 14.98        | N/A         |
| Combustion Turbine/Diesel                                | 0.00         | 0.04         | 0.71         | 0.71         | 2.18         | 2.66         | 3.85         | 4.14         | 5.11         | 6.25         | 6.67         | 7.21         | 7.98         | 8.90         | 9.57         | 10.22        | 11.27        | 11.80        | 12.63        | 13.05        | 13.62        | 13.85        | N/A         |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |
| Renewable 4/   | 0.00         | 0.00         | 0.07         | 0.08         | 0.08         | 0.09         | 0.10         | 0.11         | 0.12         | 0.13         | 0.14         | 0.15         | 0.16         | 0.17         | 0.18         | 0.19         | 0.19         | 0.20         | 0.21         | 0.21         | 0.22         | 0.23         | N/A         |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.04</b>  | <b>1.20</b>  | <b>2.54</b>  | <b>4.02</b>  | <b>5.60</b>  | <b>7.69</b>  | <b>8.81</b>  | <b>10.75</b> | <b>12.83</b> | <b>14.27</b> | <b>15.30</b> | <b>16.49</b> | <b>17.73</b> | <b>19.23</b> | <b>20.77</b> | <b>22.87</b> | <b>24.51</b> | <b>26.10</b> | <b>27.16</b> | <b>28.66</b> | <b>29.35</b> | <b>N/A</b>  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.64</b>  | <b>1.81</b>  | <b>3.15</b>  | <b>4.63</b>  | <b>6.20</b>  | <b>8.30</b>  | <b>9.42</b>  | <b>11.36</b> | <b>13.44</b> | <b>14.88</b> | <b>15.90</b> | <b>17.10</b> | <b>18.34</b> | <b>19.84</b> | <b>21.38</b> | <b>23.48</b> | <b>25.12</b> | <b>26.71</b> | <b>27.77</b> | <b>29.27</b> | <b>29.96</b> | <b>N/A</b>  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.00</b>  | <b>0.08</b>  | <b>0.16</b>  | <b>1.37</b>  | <b>2.79</b>  | <b>3.88</b>  | <b>4.60</b>  | <b>5.44</b>  | <b>5.99</b>  | <b>5.99</b>  | <b>5.99</b>  | <b>6.02</b>  | <b>6.02</b>  | <b>6.06</b>  | <b>7.14</b>  | <b>8.08</b>  | <b>8.08</b>  | <b>8.08</b>  | <b>8.99</b>  | <b>8.99</b>  | <b>8.99</b>  | <b>N/A</b>  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |
| Coal   | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.62         | 0.0%        |
| Petroleum  | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.0%        |
| Natural Gas  | 3.64         | 3.77         | 4.59         | 4.63         | 4.65         | 4.68         | 4.72         | 4.75         | 4.78         | 4.82         | 4.85         | 4.89         | 4.93         | 4.97         | 5.01         | 5.06         | 5.12         | 5.18         | 5.24         | 5.30         | 5.35         | 5.40         | 1.8%        |
| Other Gaseous Fuels                                      | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 3.7%        |
| Renewables   | 1.14         | 1.16         | 1.19         | 1.21         | 1.25         | 1.28         | 1.31         | 1.33         | 1.36         | 1.38         | 1.40         | 1.43         | 1.44         | 1.46         | 1.48         | 1.50         | 1.53         | 1.55         | 1.57         | 1.58         | 1.60         | 1.63         | 1.6%        |
| Other  | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 3.0%        |
| <b>Total</b>   | <b>5.45</b>  | <b>5.60</b>  | <b>6.45</b>  | <b>6.51</b>  | <b>6.57</b>  | <b>6.63</b>  | <b>6.70</b>  | <b>6.75</b>  | <b>6.81</b>  | <b>6.87</b>  | <b>6.93</b>  | <b>6.99</b>  | <b>7.04</b>  | <b>7.10</b>  | <b>7.16</b>  | <b>7.24</b>  | <b>7.33</b>  | <b>7.40</b>  | <b>7.49</b>  | <b>7.56</b>  | <b>7.63</b>  | <b>7.70</b>  | <b>1.6%</b> |

**Table 69. Electric Power Projections for EMM Region (2 of 3)  
10 - Southwest Power Pool**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 102.20 | 105.29 | 107.32 | 109.14 | 110.77 | 112.47 | 114.51 | 116.20 | 117.88 | 119.85 | 122.12 | 124.06 | 126.00 | 127.99 | 130.00 | 131.84 | 133.60 | 135.31 | 137.01 | 138.70 | 140.60 | 142.39 | 1.5%      |
| Commercial/Other  | 86.01  | 87.68  | 89.63  | 91.26  | 92.45  | 93.70  | 95.50  | 96.87  | 98.17  | 99.75  | 101.56 | 102.95 | 104.77 | 106.36 | 107.73 | 108.70 | 109.40 | 110.08 | 110.59 | 110.90 | 111.29 | 111.43 | 1.2%      |
| Industrial  | 103.23 | 101.80 | 101.60 | 103.74 | 106.21 | 108.09 | 110.23 | 111.92 | 113.88 | 115.23 | 115.93 | 117.05 | 118.02 | 119.44 | 121.21 | 123.13 | 125.25 | 126.64 | 128.18 | 129.55 | 131.15 | 132.79 | 1.2%      |
| Transportation  | 1.40   | 1.43   | 1.47   | 1.51   | 1.67   | 1.83   | 1.97   | 2.10   | 2.22   | 2.34   | 2.46   | 2.58   | 2.70   | 2.81   | 2.93   | 3.04   | 3.10   | 3.09   | 3.07   | 3.04   | 3.01   | 2.97   | 3.5%      |
| Total Sales   | 292.84 | 296.20 | 300.02 | 305.65 | 311.10 | 316.09 | 322.21 | 327.10 | 332.14 | 337.17 | 342.06 | 346.64 | 351.49 | 356.61 | 361.87 | 366.71 | 371.35 | 375.12 | 378.84 | 382.19 | 386.04 | 389.59 | 1.3%      |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Gross International Exports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Gross Interregional Elec. Imports                         | 34.43  | 31.02  | 35.00  | 33.07  | 34.82  | 34.93  | 32.90  | 33.01  | 31.87  | 31.90  | 32.74  | 30.15  | 28.96  | 28.80  | 27.34  | 27.42  | 24.07  | 24.51  | 22.90  | 21.51  | 21.67  | 21.96  | -2.0%     |
| Gross Interregional Elec. Exports                         | 33.44  | 32.45  | 30.83  | 27.34  | 23.69  | 22.08  | 21.01  | 21.90  | 22.19  | 21.49  | 19.50  | 18.09  | 17.22  | 15.79  | 15.06  | 13.90  | 12.68  | 11.07  | 9.59   | 7.33   | 5.46   | 4.53   | -8.7%     |
| Purchases from cogenerators 6/                            | 8.50   | 8.87   | 8.90   | 9.10   | 9.28   | 9.46   | 9.66   | 9.86   | 10.06  | 10.28  | 10.49  | 10.72  | 10.95  | 11.20  | 11.45  | 11.72  | 11.99  | 12.25  | 12.51  | 12.74  | 12.97  | 13.16  | 2.0%      |
| Util. Generation for Customers                            | 311.32 | 310.88 | 309.24 | 313.26 | 313.33 | 316.54 | 323.58 | 329.10 | 335.43 | 339.58 | 341.51 | 347.08 | 352.03 | 355.69 | 361.44 | 364.79 | 371.25 | 372.97 | 376.75 | 379.22 | 381.06 | 383.46 | 1.0%      |
| Total Net Energy for Load                                 | 320.81 | 318.32 | 322.32 | 328.09 | 333.74 | 338.85 | 345.14 | 350.07 | 355.17 | 360.26 | 365.25 | 369.85 | 374.71 | 379.89 | 385.17 | 390.03 | 394.63 | 398.65 | 402.58 | 406.14 | 410.25 | 414.05 | 1.2%      |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 168.71 | 181.46 | 186.38 | 191.19 | 196.08 | 197.51 | 197.79 | 198.01 | 194.27 | 191.41 | 191.40 | 191.37 | 191.15 | 191.19 | 190.99 | 191.08 | 191.21 | 191.38 | 191.61 | 191.50 | 192.04 | 192.63 | 0.6%      |
| Petroleum   | 6.52   | 7.61   | 8.30   | 7.19   | 6.53   | 5.30   | 6.27   | 7.42   | 7.74   | 7.97   | 7.07   | 6.70   | 6.64   | 6.51   | 6.40   | 6.48   | 6.46   | 6.18   | 5.90   | 5.83   | 5.42   | 5.64   | -0.7%     |
| Natural Gas   | 78.44  | 69.61  | 61.81  | 62.06  | 57.84  | 60.82  | 66.63  | 70.80  | 80.56  | 87.37  | 89.87  | 95.80  | 100.98 | 104.70 | 110.71 | 117.09 | 128.93 | 135.29 | 139.11 | 143.95 | 150.02 | 151.61 | 3.0%      |
| Nuclear   | 48.21  | 45.69  | 45.75  | 45.78  | 45.78  | 45.78  | 45.78  | 45.63  | 45.56  | 45.48  | 45.78  | 45.78  | 45.78  | 45.78  | 45.78  | 42.55  | 37.03  | 32.47  | 32.47  | 30.25  | 25.87  | 25.87  | -2.8%     |
| Pumped Storage/Other 3/                                   | -0.09  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -2.9%     |
| Renewable 4/  | 9.58   | 6.63   | 7.12   | 7.15   | 7.19   | 7.22   | 7.28   | 7.33   | 7.38   | 7.43   | 7.48   | 7.52   | 7.57   | 7.60   | 7.64   | 7.67   | 7.70   | 7.73   | 7.75   | 7.77   | 7.79   | 7.81   | -0.9%     |
| Total Generation  | 311.37 | 310.94 | 309.30 | 313.32 | 313.37 | 316.58 | 323.62 | 329.14 | 335.46 | 339.62 | 341.55 | 347.12 | 352.07 | 355.73 | 361.48 | 364.83 | 371.29 | 373.01 | 376.79 | 379.26 | 381.10 | 383.50 | 1.0%      |
| Sales to Customers  | 311.32 | 310.88 | 309.24 | 313.26 | 313.33 | 316.54 | 323.58 | 329.10 | 335.43 | 339.58 | 341.51 | 347.08 | 352.03 | 355.69 | 361.44 | 364.79 | 371.25 | 372.97 | 376.75 | 379.22 | 381.06 | 383.46 | 1.0%      |
| Generation for Own Use                                    | 0.06   | 0.06   | 0.06   | 0.06   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | -1.8%     |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 3.16   | 4.97   | 4.97   | 4.97   | 4.97   | 4.97   | 4.97   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 4.96   | 2.1%      |
| Petroleum   | 1.76   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -24.2%    |
| Natural Gas   | 23.15  | 23.68  | 23.91  | 24.14  | 24.36  | 24.58  | 24.84  | 25.07  | 25.29  | 25.63  | 25.87  | 26.19  | 26.56  | 26.91  | 27.26  | 27.70  | 28.15  | 28.61  | 29.13  | 29.55  | 29.96  | 30.29  | 1.2%      |
| Other Gaseous Fuels                                       | 0.00   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 4.0%      |
| Renewable   | 8.88   | 7.58   | 7.77   | 7.95   | 8.15   | 8.33   | 8.52   | 8.67   | 8.81   | 8.95   | 9.06   | 9.20   | 9.28   | 9.39   | 9.52   | 9.68   | 9.84   | 9.95   | 10.05  | 10.15  | 10.26  | 10.40  | 0.7%      |
| Other   | 0.53   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.56   | 0.57   | 0.57   | 0.57   | 0.57   | 0.57   | 0.57   | 0.57   | 0.57   | 0.58   | 0.4%      |
| Total   | 37.48  | 36.79  | 37.21  | 37.62  | 38.04  | 38.44  | 38.89  | 39.27  | 39.63  | 40.11  | 40.47  | 40.93  | 41.38  | 41.83  | 42.32  | 42.92  | 43.54  | 44.10  | 44.72  | 45.24  | 45.77  | 46.24  | 1.0%      |
| Sales to Utilities  | 8.50   | 8.87   | 8.90   | 9.10   | 9.28   | 9.46   | 9.66   | 9.86   | 10.06  | 10.28  | 10.49  | 10.72  | 10.95  | 11.20  | 11.45  | 11.72  | 11.99  | 12.25  | 12.51  | 12.74  | 12.97  | 13.16  | 2.0%      |
| Generation for Own Use                                    | 28.98  | 27.93  | 28.31  | 28.52  | 28.77  | 28.98  | 29.23  | 29.41  | 29.57  | 29.83  | 29.97  | 30.21  | 30.44  | 30.64  | 30.87  | 31.20  | 31.55  | 31.86  | 32.21  | 32.50  | 32.80  | 33.08  | 0.6%      |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 6.3    | 6.4    | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    | 6.3    | 6.4    | 6.4    | 6.4    | 6.4    | 6.4    | 6.3    | 6.2    | 6.2    | 6.2    | 6.3    | 6.3    | 6.3    | 6.3    | 6.2    | -0.1%     |
| Commercial  | 6.6    | 6.7    | 6.5    | 6.5    | 6.5    | 6.5    | 6.5    | 6.6    | 6.6    | 6.7    | 6.7    | 6.7    | 6.6    | 6.5    | 6.3    | 6.4    | 6.4    | 6.5    | 6.5    | 6.5    | 6.5    | 6.4    | -0.1%     |
| Industrial  | 3.7    | 3.8    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.8    | 3.7    | 3.6    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | -0.2%     |
| Transportation  | 4.4    | 4.5    | 4.4    | 4.4    | 4.4    | 4.3    | 4.2    | 4.2    | 4.2    | 4.2    | 4.2    | 4.1    | 4.0    | 3.9    | 3.9    | 3.8    | 3.8    | 3.8    | 3.7    | 3.7    | 3.7    | 3.6    | -0.9%     |
| All Sectors Average                                       | 5.5    | 5.5    | 5.5    | 5.5    | 5.4    | 5.4    | 5.5    | 5.5    | 5.5    | 5.5    | 5.6    | 5.6    | 5.5    | 5.4    | 5.3    | 5.3    | 5.3    | 5.4    | 5.4    | 5.4    | 5.4    | 5.3    | -0.1%     |

**Table 69. Electric Power Projections for EMM Region (3 of 3)  
10 - Southwest Power Pool**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-<br>2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Coal                                  | 1.79   | 1.98   | 2.03   | 2.09   | 2.14   | 2.16   | 2.16   | 2.17   | 2.13   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 2.08   | 0.7%          |
| Natural Gas                           | 0.87   | 0.73   | 0.64   | 0.61   | 0.57   | 0.57   | 0.61   | 0.64   | 0.72   | 0.76   | 0.76   | 0.80   | 0.84   | 0.86   | 0.90   | 0.94   | 1.02   | 1.05   | 1.07   | 1.10   | 1.13   | 1.14   | 1.2%          |
| Oil                                   | 0.07   | 0.08   | 0.09   | 0.08   | 0.07   | 0.06   | 0.07   | 0.08   | 0.08   | 0.08   | 0.07   | 0.07   | 0.07   | 0.07   | 0.07   | 0.07   | 0.07   | 0.06   | 0.06   | 0.06   | 0.06   | 0.06   | -0.7%         |
| Total                                 | 2.73   | 2.79   | 2.76   | 2.78   | 2.78   | 2.79   | 2.84   | 2.88   | 2.92   | 2.93   | 2.92   | 2.95   | 2.99   | 3.01   | 3.04   | 3.08   | 3.17   | 3.19   | 3.21   | 3.23   | 3.27   | 3.28   | 0.8%          |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Carbon Dioxide                        | 251.84 | 257.72 | 257.48 | 260.20 | 262.50 | 263.21 | 266.59 | 269.34 | 269.90 | 268.03 | 267.05 | 268.79 | 270.38 | 271.52 | 273.20 | 275.49 | 280.35 | 281.85 | 282.63 | 283.99 | 286.14 | 287.15 | 0.6%          |
| Sulfur Dioxide                        | 0.72   | 0.71   | 0.69   | 0.70   | 0.73   | 0.73   | 0.73   | 0.74   | 0.72   | 0.71   | 0.71   | 0.70   | 0.70   | 0.70   | 0.70   | 0.70   | 0.70   | 0.70   | 0.70   | 0.70   | 0.70   | 0.70   | -0.1%         |
| Nitrogen Oxide                        | 0.70   | 0.53   | 0.52   | 0.52   | 0.52   | 0.52   | 0.52   | 0.52   | 0.52   | 0.52   | 0.51   | 0.51   | 0.51   | 0.51   | 0.52   | 0.52   | 0.52   | 0.52   | 0.52   | 0.52   | 0.52   | 0.52   | -1.3%         |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatt-hour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 70. Electric Power Projections for EMM Region (1 of 3)  
11 - Western Systems Coordinating Council/NWP**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 11.61        | 11.61        | 11.61        | 11.61        | 11.61        | 11.61        | 11.62        | 11.65        | 11.68        | 11.68        | 11.70        | 11.73        | 11.79        | 11.80        | 11.84        | 11.88        | 11.94        | 12.01        | 12.09        | 12.16        | 12.27        | 12.37        | 0.3%        |  |
| Other Fossil Steam 2/                                    | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | N/A         |  |
| Combined Cycle   | 1.78         | 2.13         | 2.48         | 3.68         | 4.80         | 6.71         | 8.34         | 9.63         | 9.63         | 9.68         | 9.81         | 10.02        | 10.05        | 10.13        | 10.23        | 10.60        | 10.78        | 11.15        | 11.32        | 11.95        | 12.60        | 12.95        | 9.4%        |  |
| Combustion Turbine/Diesel                                | 1.53         | 1.88         | 2.40         | 2.47         | 2.95         | 3.29         | 3.60         | 3.60         | 3.60         | 3.60         | 3.60         | 3.60         | 3.60         | 3.60         | 3.60         | 3.60         | 3.60         | 3.60         | 3.73         | 3.74         | 3.74         | 3.74         | 4.2%        |  |
| Nuclear Power  | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | 1.17         | N/A         |  |
| Pumped Storage/Other 3/                                  | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | 0.31         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 35.51        | 35.50        | 35.63        | 35.69        | 35.72        | 35.74        | 35.76        | 35.78        | 35.80        | 35.92        | 35.98        | 36.00        | 36.04        | 36.08        | 36.15        | 36.31        | 36.35        | 36.40        | 36.52        | 36.61        | 36.64        | 36.85        | 0.2%        |  |
| <b>Total Capability</b>                                  | <b>52.63</b> | <b>53.34</b> | <b>54.32</b> | <b>55.66</b> | <b>57.29</b> | <b>59.56</b> | <b>61.53</b> | <b>62.86</b> | <b>62.92</b> | <b>63.08</b> | <b>63.29</b> | <b>63.56</b> | <b>63.68</b> | <b>63.82</b> | <b>64.03</b> | <b>64.60</b> | <b>64.88</b> | <b>65.36</b> | <b>65.87</b> | <b>66.67</b> | <b>67.46</b> | <b>68.11</b> | <b>1.2%</b> |  |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Combined Cycle   | 0.00         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | 0.10         | N/A         |  |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.03         | 0.04         | 0.04         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | N/A         |  |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.10</b>  | <b>0.10</b>  | <b>0.10</b>  | <b>0.10</b>  | <b>0.12</b>  | <b>0.12</b>  | <b>0.12</b>  | <b>0.13</b>  | <b>0.14</b>  | <b>0.15</b>  | <b>0.15</b>  | <b>0.15</b>  | <b>0.15</b>  | <b>0.15</b>  | <b>0.16</b>  | <b>N/A</b>  |  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.03         | 0.07         | 0.07         | 0.09         | 0.12         | 0.17         | 0.19         | 0.23         | 0.26         | 0.33         | 0.40         | 0.48         | 0.55         | 0.65         | 0.76         | N/A         |  |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Combined Cycle   | 0.00         | 0.26         | 0.61         | 1.81         | 2.93         | 4.84         | 6.47         | 7.75         | 7.75         | 7.80         | 7.94         | 8.15         | 8.18         | 8.26         | 8.36         | 8.73         | 8.91         | 9.28         | 9.45         | 10.08        | 10.73        | 11.07        | N/A         |  |
| Combustion Turbine/Diesel                                | 0.00         | 0.36         | 0.87         | 0.95         | 1.42         | 1.77         | 2.08         | 2.08         | 2.08         | 2.08         | 2.08         | 2.08         | 2.08         | 2.08         | 2.08         | 2.08         | 2.08         | 2.08         | 2.21         | 2.22         | 2.22         | 2.22         | N/A         |  |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 0.00         | 0.00         | 0.12         | 0.18         | 0.21         | 0.22         | 0.23         | 0.25         | 0.26         | 0.37         | 0.42         | 0.46         | 0.50         | 0.55         | 0.62         | 0.77         | 0.81         | 0.86         | 0.98         | 1.07         | 1.10         | 1.31         | N/A         |  |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.62</b>  | <b>1.60</b>  | <b>2.93</b>  | <b>4.56</b>  | <b>6.83</b>  | <b>8.79</b>  | <b>10.11</b> | <b>10.17</b> | <b>10.33</b> | <b>10.53</b> | <b>10.81</b> | <b>10.94</b> | <b>11.08</b> | <b>11.29</b> | <b>11.85</b> | <b>12.13</b> | <b>12.61</b> | <b>13.12</b> | <b>13.92</b> | <b>14.71</b> | <b>15.36</b> | <b>N/A</b>  |  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.72</b>  | <b>1.70</b>  | <b>3.04</b>  | <b>4.66</b>  | <b>6.94</b>  | <b>8.91</b>  | <b>10.24</b> | <b>10.30</b> | <b>10.47</b> | <b>10.68</b> | <b>10.96</b> | <b>11.09</b> | <b>11.23</b> | <b>11.44</b> | <b>12.01</b> | <b>12.29</b> | <b>12.77</b> | <b>13.28</b> | <b>14.07</b> | <b>14.86</b> | <b>15.52</b> | <b>N/A</b>  |  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.01</b>  | <b>0.04</b>  | <b>N/A</b>  |  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal   | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.12         | 0.0%        |  |
| Petroleum  | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.1%        |  |
| Natural Gas  | 0.63         | 0.63         | 1.10         | 1.10         | 1.10         | 1.10         | 1.10         | 1.11         | 1.11         | 1.11         | 1.11         | 1.11         | 1.11         | 1.12         | 1.12         | 1.12         | 1.12         | 1.13         | 1.13         | 1.13         | 1.13         | 1.13         | 2.7%        |  |
| Other Gaseous Fuels                                      | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.02         | 3.7%        |  |
| Renewables   | 0.51         | 0.51         | 0.52         | 0.53         | 0.55         | 0.56         | 0.57         | 0.58         | 0.59         | 0.60         | 0.60         | 0.61         | 0.62         | 0.62         | 0.63         | 0.64         | 0.65         | 0.66         | 0.66         | 0.67         | 0.68         | 0.69         | 1.4%        |  |
| Other  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 3.0%        |  |
| <b>Total</b>   | <b>1.28</b>  | <b>1.29</b>  | <b>1.77</b>  | <b>1.78</b>  | <b>1.80</b>  | <b>1.81</b>  | <b>1.82</b>  | <b>1.83</b>  | <b>1.84</b>  | <b>1.85</b>  | <b>1.86</b>  | <b>1.87</b>  | <b>1.88</b>  | <b>1.89</b>  | <b>1.90</b>  | <b>1.91</b>  | <b>1.92</b>  | <b>1.93</b>  | <b>1.94</b>  | <b>1.95</b>  | <b>1.96</b>  | <b>1.97</b>  | <b>2.0%</b> |  |

**Table 70. Electric Power Projections for EMM Region (2 of 3)  
11 - Western Systems Coordinating Council/NWP**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 69.26  | 77.78  | 79.23  | 80.40  | 81.38  | 82.67  | 84.13  | 85.44  | 86.48  | 87.65  | 89.03  | 90.40  | 91.39  | 92.37  | 93.46  | 94.74  | 95.98  | 97.08  | 98.28  | 99.47  | 100.77 | 102.05 | 1.8%      |
| Commercial/Other  | 58.34  | 66.91  | 68.34  | 69.95  | 70.98  | 72.19  | 73.58  | 74.89  | 76.09  | 77.44  | 78.66  | 79.78  | 80.89  | 81.85  | 82.71  | 83.55  | 84.29  | 84.95  | 85.57  | 86.13  | 86.67  | 87.15  | 1.8%      |
| Industrial  | 83.38  | 91.16  | 91.90  | 94.07  | 96.34  | 98.28  | 100.29 | 101.90 | 103.52 | 104.95 | 105.87 | 107.19 | 108.23 | 109.78 | 111.58 | 113.48 | 115.37 | 116.44 | 117.91 | 119.38 | 120.94 | 122.46 | 1.8%      |
| Transportation  | 1.47   | 1.66   | 1.71   | 1.76   | 1.95   | 2.14   | 2.32   | 2.48   | 2.62   | 2.76   | 2.91   | 3.06   | 3.20   | 3.34   | 3.48   | 3.62   | 3.71   | 3.71   | 3.70   | 3.68   | 3.66   | 3.63   | 4.2%      |
| Total Sales   | 212.45 | 237.51 | 241.17 | 246.19 | 250.65 | 255.28 | 260.32 | 264.71 | 268.72 | 272.80 | 276.46 | 280.43 | 283.72 | 287.35 | 291.24 | 295.39 | 299.34 | 302.18 | 305.46 | 308.66 | 312.04 | 315.29 | 1.8%      |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                               | 11.24  | 14.25  | 16.56  | 19.99  | 22.58  | 22.69  | 24.54  | 24.79  | 24.19  | 24.48  | 24.01  | 23.74  | 23.40  | 22.48  | 21.78  | 21.46  | 20.98  | 21.41  | 20.79  | 20.76  | 20.35  | 17.14  | 1.9%      |
| Gross International Exports                               | 7.27   | 9.82   | 9.82   | 9.84   | 15.08  | 15.10  | 15.13  | 15.16  | 15.18  | 14.29  | 13.39  | 12.50  | 11.57  | 10.65  | 9.73   | 8.81   | 7.88   | 6.96   | 6.04   | 5.11   | 4.19   | 3.73   | -3.0%     |
| Gross Interregional Elec. Imports                         | 21.32  | 21.92  | 21.35  | 21.34  | 20.45  | 20.44  | 18.46  | 18.21  | 18.21  | 16.81  | 15.55  | 14.14  | 12.79  | 11.43  | 10.04  | 8.63   | 7.15   | 5.86   | 4.45   | 2.96   | 1.57   | 0.93   | -13.3%    |
| Gross Interregional Elec. Exports                         | 50.94  | 33.52  | 39.89  | 48.35  | 52.70  | 62.99  | 69.04  | 70.81  | 68.04  | 64.02  | 61.42  | 59.31  | 56.63  | 53.91  | 50.51  | 49.15  | 45.07  | 43.79  | 40.86  | 39.73  | 39.10  | 35.06  | -1.7%     |
| Purchases from cogenerators 6/                            | 3.33   | 3.24   | 3.25   | 3.27   | 3.30   | 3.32   | 3.35   | 3.37   | 3.40   | 3.42   | 3.45   | 3.48   | 3.50   | 3.53   | 3.56   | 3.59   | 3.62   | 3.65   | 3.68   | 3.71   | 3.74   | 3.77   | 0.6%      |
| Util. Generation for Customers                            | 245.60 | 261.56 | 269.86 | 279.94 | 292.32 | 307.04 | 318.31 | 324.55 | 326.53 | 326.90 | 328.81 | 331.51 | 332.87 | 335.15 | 336.82 | 340.43 | 341.38 | 343.03 | 344.72 | 347.57 | 351.39 | 354.25 | 1.7%      |
| Total Net Energy for Load                                 | 223.28 | 257.64 | 261.31 | 266.36 | 270.87 | 275.41 | 280.50 | 284.97 | 289.11 | 293.30 | 297.01 | 301.07 | 304.36 | 308.02 | 311.96 | 316.14 | 320.18 | 323.20 | 326.74 | 330.16 | 333.76 | 337.30 | 1.9%      |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 84.31  | 80.55  | 82.37  | 84.17  | 86.10  | 88.14  | 88.26  | 88.43  | 88.71  | 88.71  | 88.83  | 89.08  | 89.50  | 89.62  | 89.89  | 90.10  | 90.48  | 90.91  | 91.46  | 91.99  | 92.80  | 93.60  | 0.5%      |
| Petroleum   | 0.17   | 0.25   | 0.25   | 0.19   | 0.10   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.08   | 0.08   | 0.08   | -3.1%     |
| Natural Gas   | 11.22  | 20.26  | 25.83  | 33.72  | 44.04  | 56.63  | 67.72  | 73.72  | 75.29  | 74.81  | 76.25  | 78.56  | 79.28  | 81.10  | 82.04  | 84.25  | 84.68  | 85.64  | 85.94  | 87.68  | 90.57  | 91.16  | 10.0%     |
| Nuclear   | 6.92   | 6.75   | 6.81   | 6.89   | 6.96   | 7.03   | 7.10   | 7.18   | 7.25   | 7.32   | 7.39   | 7.46   | 7.53   | 7.61   | 7.68   | 7.76   | 7.76   | 7.75   | 7.75   | 7.75   | 7.75   | 7.75   | 0.5%      |
| Pumped Storage/Other 3/                                   | 0.00   | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | N/A       |
| Renewable 4/  | 144.10 | 155.09 | 155.95 | 156.34 | 156.49 | 156.54 | 156.53 | 156.54 | 156.60 | 157.40 | 157.69 | 157.75 | 157.91 | 158.16 | 158.56 | 159.67 | 159.82 | 160.08 | 160.93 | 161.49 | 161.62 | 163.09 | 0.6%      |
| Total Generation  | 246.71 | 262.68 | 270.99 | 281.09 | 293.46 | 308.21 | 319.48 | 325.74 | 327.72 | 328.11 | 330.02 | 332.72 | 334.08 | 336.36 | 338.03 | 341.65 | 342.61 | 344.25 | 345.94 | 348.79 | 352.61 | 355.47 | 1.7%      |
| Sales to Customers  | 245.60 | 261.56 | 269.86 | 279.94 | 292.32 | 307.04 | 318.31 | 324.55 | 326.53 | 326.90 | 328.81 | 331.51 | 332.87 | 335.15 | 336.82 | 340.43 | 341.38 | 343.03 | 344.72 | 347.57 | 351.39 | 354.25 | 1.7%      |
| Generation for Own Use                                    | 1.11   | 1.11   | 1.13   | 1.15   | 1.15   | 1.17   | 1.17   | 1.19   | 1.19   | 1.21   | 1.21   | 1.21   | 1.21   | 1.21   | 1.21   | 1.22   | 1.22   | 1.22   | 1.22   | 1.22   | 1.22   | 1.22   | 0.4%      |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 0.32   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 0.75   | 4.0%      |
| Petroleum   | 0.48   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | -14.4%    |
| Natural Gas   | 3.05   | 2.93   | 2.93   | 2.94   | 2.95   | 2.95   | 2.96   | 2.97   | 2.97   | 2.98   | 2.99   | 3.00   | 3.01   | 3.02   | 3.03   | 3.04   | 3.06   | 3.07   | 3.08   | 3.09   | 3.11   | 3.12   | 0.1%      |
| Other Gaseous Fuels                                       | 0.01   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.03   | 0.03   | 0.03   | 0.03   | 4.0%      |
| Renewable   | 2.44   | 2.54   | 2.59   | 2.63   | 2.68   | 2.73   | 2.78   | 2.81   | 2.85   | 2.89   | 2.91   | 2.95   | 2.97   | 3.00   | 3.03   | 3.07   | 3.11   | 3.14   | 3.16   | 3.19   | 3.22   | 3.25   | 1.3%      |
| Other   | 0.54   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.42   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | 0.43   | -1.0%     |
| Total   | 6.83   | 6.67   | 6.73   | 6.78   | 6.84   | 6.89   | 6.95   | 6.99   | 7.03   | 7.08   | 7.11   | 7.16   | 7.19   | 7.23   | 7.27   | 7.33   | 7.38   | 7.42   | 7.47   | 7.50   | 7.55   | 7.59   | 0.5%      |
| Sales to Utilities  | 3.33   | 3.24   | 3.25   | 3.27   | 3.30   | 3.32   | 3.35   | 3.37   | 3.40   | 3.42   | 3.45   | 3.48   | 3.50   | 3.53   | 3.56   | 3.59   | 3.62   | 3.65   | 3.68   | 3.71   | 3.74   | 3.77   | 0.6%      |
| Generation for Own Use                                    | 3.51   | 3.42   | 3.48   | 3.50   | 3.54   | 3.57   | 3.60   | 3.62   | 3.63   | 3.65   | 3.67   | 3.68   | 3.69   | 3.70   | 3.72   | 3.74   | 3.76   | 3.78   | 3.79   | 3.80   | 3.81   | 3.82   | 0.4%      |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 5.9    | 6.1    | 6.0    | 6.0    | 6.2    | 6.2    | 6.2    | 6.1    | 6.1    | 6.0    | 5.9    | 5.8    | 5.7    | 5.6    | 5.5    | 5.5    | 5.4    | 5.4    | 5.2    | 5.2    | 5.2    | 5.2    | -0.6%     |
| Commercial  | 5.0    | 5.1    | 5.1    | 5.0    | 5.2    | 5.3    | 5.5    | 5.6    | 5.6    | 5.5    | 5.4    | 5.4    | 5.3    | 5.2    | 5.2    | 5.2    | 5.1    | 5.2    | 5.2    | 5.2    | 5.2    | 5.2    | 0.2%      |
| Industrial  | 3.3    | 3.4    | 3.3    | 3.3    | 3.5    | 3.5    | 3.6    | 3.7    | 3.7    | 3.6    | 3.6    | 3.5    | 3.5    | 3.4    | 3.4    | 3.4    | 3.4    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 0.1%      |
| Transportation  | 4.8    | 4.6    | 4.6    | 4.6    | 4.6    | 4.6    | 4.5    | 4.5    | 4.5    | 4.4    | 4.4    | 4.4    | 4.3    | 4.2    | 4.2    | 4.2    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | -0.8%     |
| All Sectors Average                                       | 4.6    | 4.8    | 4.7    | 4.7    | 4.9    | 4.9    | 5.0    | 5.0    | 5.0    | 4.9    | 4.9    | 4.8    | 4.7    | 4.6    | 4.6    | 4.6    | 4.5    | 4.5    | 4.5    | 4.5    | 4.4    | 4.4    | -0.2%     |

**Table 70. Electric Power Projections for EMM Region (3 of 3)  
11 - Western Systems Coordinating Council/NWP**

|                                       | 1998  | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-<br>2020 |
|---------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Fuel Consumption (quadrillion Btu) 8/ |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Coal                                  | 0.90  | 0.88   | 0.90   | 0.92   | 0.94   | 0.96   | 0.96   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.97   | 0.98   | 0.98   | 0.98   | 0.98   | 0.99   | 0.99   | 1.00   | 1.00   | 0.5%          |
| Natural Gas                           | 0.17  | 0.19   | 0.23   | 0.29   | 0.36   | 0.44   | 0.52   | 0.55   | 0.57   | 0.56   | 0.57   | 0.59   | 0.60   | 0.61   | 0.62   | 0.63   | 0.63   | 0.63   | 0.63   | 0.64   | 0.65   | 0.65   | 6.2%          |
| Oil                                   | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -4.3%         |
| Total                                 | 1.07  | 1.07   | 1.14   | 1.21   | 1.30   | 1.41   | 1.48   | 1.52   | 1.54   | 1.53   | 1.54   | 1.56   | 1.57   | 1.59   | 1.60   | 1.61   | 1.61   | 1.62   | 1.62   | 1.63   | 1.65   | 1.66   | 2.0%          |
| Emissions(million short tons) 9/      |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Carbon Dioxide                        | 93.47 | 103.26 | 107.96 | 113.09 | 119.59 | 126.58 | 131.17 | 133.51 | 134.58 | 134.41 | 135.09 | 136.29 | 137.01 | 137.94 | 138.55 | 139.47 | 139.76 | 140.21 | 140.58 | 141.36 | 142.88 | 143.56 | 2.0%          |
| Sulfur Dioxide                        | 0.17  | 0.17   | 0.17   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.18   | 0.2%          |
| Nitrogen Oxide                        | 0.21  | 0.17   | 0.18   | 0.19   | 0.19   | 0.20   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.21   | 0.2%          |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatthour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 71. Electric Power Projections for EMM Region (1 of 3)  
12 - Western Systems Coordinating Council/RA**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 13.26        | 13.26        | 13.27        | 13.28        | 13.28        | 13.30        | 13.38        | 13.48        | 13.51        | 13.73        | 13.87        | 13.93        | 13.98        | 13.98        | 13.98        | 14.03        | 14.03        | 14.21        | 14.37        | 14.54        | 14.82        | 14.82        | 0.5%        |  |
| Other Fossil Steam 2/                                    | 2.60         | 2.60         | 2.60         | 2.60         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | 2.37         | -0.4%       |  |
| Combined Cycle   | 0.99         | 1.19         | 1.70         | 2.23         | 2.73         | 3.65         | 4.59         | 4.59         | 4.59         | 4.94         | 5.02         | 5.08         | 5.08         | 5.08         | 5.08         | 5.08         | 5.08         | 5.12         | 5.13         | 5.18         | 5.21         | 5.26         | 7.9%        |  |
| Combustion Turbine/Diesel                                | 3.44         | 3.54         | 3.55         | 3.55         | 3.77         | 3.75         | 3.75         | 4.40         | 5.03         | 5.03         | 5.03         | 5.03         | 5.03         | 5.03         | 5.03         | 5.03         | 5.04         | 5.04         | 5.15         | 5.17         | 5.35         | 5.36         | 2.0%        |  |
| Nuclear Power  | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | 2.97         | N/A         |  |
| Pumped Storage/Other 3/                                  | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | 0.72         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 4.36         | 4.45         | 4.50         | 4.50         | 4.50         | 4.51         | 4.52         | 4.53         | 4.54         | 4.55         | 4.56         | 4.58         | 4.59         | 4.60         | 4.61         | 4.62         | 4.63         | 4.66         | 4.67         | 4.68         | 4.68         | 4.69         | 0.3%        |  |
| <b>Total Capability</b>                                  | <b>28.34</b> | <b>28.72</b> | <b>29.29</b> | <b>29.83</b> | <b>30.33</b> | <b>31.26</b> | <b>32.28</b> | <b>33.04</b> | <b>33.72</b> | <b>34.30</b> | <b>34.53</b> | <b>34.66</b> | <b>34.72</b> | <b>34.73</b> | <b>34.74</b> | <b>34.75</b> | <b>34.81</b> | <b>34.90</b> | <b>35.21</b> | <b>35.44</b> | <b>35.84</b> | <b>36.18</b> | <b>1.1%</b> |  |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Combustion Turbine/Diesel                                | 0.00         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | N/A         |  |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 0.00         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | 0.09         | N/A         |  |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.17</b>  | <b>0.18</b>  | <b>N/A</b>  |  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.02         | 0.02         | 0.04         | 0.11         | 0.21         | 0.25         | 0.47         | 0.61         | 0.67         | 0.72         | 0.72         | 0.72         | 0.72         | 0.77         | 0.77         | 0.95         | 1.11         | 1.28         | 1.56         | N/A         |  |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Combined Cycle   | 0.00         | 0.20         | 0.70         | 1.23         | 1.74         | 2.66         | 3.60         | 3.60         | 3.95         | 4.02         | 4.08         | 4.08         | 4.08         | 4.08         | 4.08         | 4.08         | 4.13         | 4.14         | 4.19         | 4.22         | 4.27         | 4.27         | N/A         |  |
| Combustion Turbine/Diesel                                | 0.00         | 0.02         | 0.02         | 0.02         | 0.25         | 0.35         | 0.35         | 1.00         | 1.63         | 1.63         | 1.63         | 1.63         | 1.63         | 1.63         | 1.63         | 1.63         | 1.64         | 1.64         | 1.76         | 1.77         | 1.95         | 1.96         | N/A         |  |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 0.00         | 0.00         | 0.04         | 0.04         | 0.05         | 0.06         | 0.07         | 0.08         | 0.09         | 0.10         | 0.11         | 0.13         | 0.14         | 0.15         | 0.16         | 0.16         | 0.17         | 0.21         | 0.22         | 0.22         | 0.23         | 0.24         | N/A         |  |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.21</b>  | <b>0.77</b>  | <b>1.32</b>  | <b>2.06</b>  | <b>3.11</b>  | <b>4.13</b>  | <b>4.89</b>  | <b>5.57</b>  | <b>6.15</b>  | <b>6.37</b>  | <b>6.51</b>  | <b>6.57</b>  | <b>6.58</b>  | <b>6.59</b>  | <b>6.60</b>  | <b>6.66</b>  | <b>6.75</b>  | <b>7.06</b>  | <b>7.29</b>  | <b>7.68</b>  | <b>8.03</b>  | <b>N/A</b>  |  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.38</b>  | <b>0.95</b>  | <b>1.49</b>  | <b>2.23</b>  | <b>3.28</b>  | <b>4.31</b>  | <b>5.06</b>  | <b>5.74</b>  | <b>6.32</b>  | <b>6.55</b>  | <b>6.69</b>  | <b>6.75</b>  | <b>6.76</b>  | <b>6.76</b>  | <b>6.77</b>  | <b>6.84</b>  | <b>6.93</b>  | <b>7.24</b>  | <b>7.46</b>  | <b>7.86</b>  | <b>8.21</b>  | <b>N/A</b>  |  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.00</b>  | <b>0.24</b>  | <b>0.36</b>  | <b>N/A</b>  |  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal   | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.08         | 0.0%        |  |
| Petroleum  | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.1%        |  |
| Natural Gas  | 1.09         | 1.10         | 1.10         | 1.10         | 1.11         | 1.11         | 1.12         | 1.12         | 1.12         | 1.13         | 1.13         | 1.14         | 1.14         | 1.15         | 1.15         | 1.16         | 1.17         | 1.17         | 1.18         | 1.19         | 1.19         | 1.20         | 0.4%        |  |
| Other Gaseous Fuels                                      | 0.01         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 0.02         | 3.7%        |  |
| Renewables   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 1.6%        |  |
| Other  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 3.0%        |  |
| <b>Total</b>   | <b>1.21</b>  | <b>1.22</b>  | <b>1.22</b>  | <b>1.23</b>  | <b>1.23</b>  | <b>1.24</b>  | <b>1.24</b>  | <b>1.24</b>  | <b>1.25</b>  | <b>1.25</b>  | <b>1.26</b>  | <b>1.26</b>  | <b>1.27</b>  | <b>1.27</b>  | <b>1.28</b>  | <b>1.29</b>  | <b>1.29</b>  | <b>1.30</b>  | <b>1.31</b>  | <b>1.32</b>  | <b>1.32</b>  | <b>1.33</b>  | <b>0.5%</b> |  |

**Table 71. Electric Power Projections for EMM Region (2 of 3)  
12 - Western Systems Coordinating Council/RA**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Residential   | 39.25  | 40.05  | 41.24  | 42.27  | 43.19  | 44.23  | 45.27  | 46.17  | 46.97  | 47.86  | 48.73  | 49.58  | 50.28  | 50.96  | 51.68  | 52.48  | 53.30  | 54.05  | 54.87  | 55.69  | 56.58  | 57.46  | 1.7%      |  |
| Commercial/Other  | 50.11  | 51.11  | 52.66  | 53.98  | 54.99  | 56.19  | 57.50  | 58.63  | 59.77  | 61.13  | 62.35  | 63.45  | 64.61  | 65.56  | 66.38  | 67.12  | 67.85  | 68.55  | 69.26  | 69.90  | 70.63  | 71.29  | 1.6%      |  |
| Industrial  | 27.03  | 25.80  | 25.94  | 26.58  | 27.26  | 27.83  | 28.42  | 28.89  | 29.38  | 29.80  | 30.07  | 30.47  | 30.79  | 31.23  | 31.78  | 32.36  | 32.93  | 33.26  | 33.69  | 34.13  | 34.59  | 35.05  | 1.2%      |  |
| Transportation  | 0.66   | 0.68   | 0.71   | 0.73   | 0.82   | 0.90   | 0.98   | 1.05   | 1.12   | 1.19   | 1.26   | 1.33   | 1.39   | 1.46   | 1.53   | 1.59   | 1.64   | 1.64   | 1.65   | 1.65   | 1.65   | 1.65   | 4.2%      |  |
| Total Sales   | 117.05 | 117.64 | 120.54 | 123.56 | 126.25 | 129.15 | 132.18 | 134.75 | 137.24 | 139.97 | 142.42 | 144.82 | 147.08 | 149.21 | 151.36 | 153.56 | 155.71 | 157.50 | 159.46 | 161.37 | 163.46 | 165.45 | 1.6%      |  |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Gross International Imports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |  |
| Gross International Exports                               | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |  |
| Gross Interregional Elec. Imports                         | 24.02  | 21.79  | 20.67  | 20.37  | 20.21  | 19.85  | 18.53  | 18.89  | 18.93  | 17.32  | 16.52  | 16.09  | 15.22  | 14.06  | 13.28  | 12.39  | 11.04  | 9.67   | 7.88   | 5.77   | 4.10   | 3.30   | -8.6%     |  |
| Gross Interregional Elec. Exports                         | 43.81  | 44.68  | 44.02  | 44.30  | 44.81  | 45.52  | 45.47  | 44.40  | 44.12  | 40.69  | 37.36  | 33.94  | 31.44  | 28.56  | 25.96  | 22.28  | 18.61  | 15.48  | 12.27  | 9.04   | 5.88   | 5.41   | -9.1%     |  |
| Purchases from cogenerators 6/                            | 3.56   | 3.45   | 3.46   | 3.46   | 3.47   | 3.48   | 3.49   | 3.50   | 3.51   | 3.52   | 3.53   | 3.54   | 3.55   | 3.56   | 3.57   | 3.58   | 3.59   | 3.60   | 3.61   | 3.62   | 3.63   | 3.64   | 0.1%      |  |
| Util. Generation for Customers                            | 144.24 | 147.25 | 150.75 | 154.48 | 157.92 | 161.97 | 166.38 | 167.63 | 169.87 | 170.85 | 170.81 | 170.30 | 170.93 | 171.33 | 171.67 | 171.09 | 170.94 | 171.07 | 171.72 | 172.61 | 173.34 | 175.76 | 0.9%      |  |
| Total Net Energy for Load                                 | 128.02 | 127.81 | 130.86 | 134.01 | 136.80 | 139.79 | 142.93 | 145.62 | 148.19 | 150.99 | 153.50 | 155.98 | 158.26 | 160.40 | 162.56 | 164.78 | 166.96 | 168.86 | 170.95 | 172.96 | 175.18 | 177.29 | 1.5%      |  |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Coal  | 93.31  | 91.31  | 92.93  | 94.63  | 96.25  | 97.92  | 98.49  | 99.22  | 99.52  | 101.14 | 102.16 | 102.60 | 102.96 | 102.96 | 102.96 | 102.96 | 103.32 | 103.37 | 104.67 | 105.84 | 107.10 | 109.20 | 0.7%      |  |
| Petroleum   | 0.13   | 0.05   | 0.05   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | -5.5%     |  |
| Natural Gas   | 8.35   | 20.46  | 21.83  | 23.74  | 25.50  | 27.74  | 31.48  | 31.90  | 33.75  | 33.00  | 31.84  | 30.73  | 30.95  | 31.33  | 31.63  | 31.02  | 30.47  | 30.33  | 29.66  | 29.36  | 28.80  | 29.11  | 5.8%      |  |
| Nuclear   | 23.79  | 21.11  | 21.29  | 21.42  | 21.48  | 21.54  | 21.60  | 21.67  | 21.73  | 21.79  | 21.85  | 21.91  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | -0.4%     |  |
| Pumped Storage/Other 3/                                   | 0.41   | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | N/A       |  |
| Renewable 4/  | 18.65  | 15.46  | 15.79  | 15.79  | 15.79  | 15.88  | 15.92  | 15.95  | 15.99  | 16.03  | 16.07  | 16.17  | 16.21  | 16.24  | 16.28  | 16.31  | 16.34  | 16.56  | 16.58  | 16.60  | 16.63  | 16.65  | -0.5%     |  |
| Total Generation  | 144.63 | 148.35 | 151.86 | 155.59 | 159.03 | 163.08 | 167.49 | 168.74 | 170.98 | 171.96 | 171.92 | 171.40 | 172.04 | 172.44 | 172.78 | 172.20 | 172.05 | 172.18 | 172.83 | 173.72 | 174.45 | 176.87 | 0.9%      |  |
| Sales to Customers  | 144.24 | 147.25 | 150.75 | 154.48 | 157.92 | 161.97 | 166.38 | 167.63 | 169.87 | 170.85 | 170.81 | 170.30 | 170.93 | 171.33 | 171.67 | 171.09 | 170.94 | 171.07 | 171.72 | 172.61 | 173.34 | 175.76 | 0.9%      |  |
| Generation for Own Use                                    | 0.39   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 1.11   | 4.9%      |  |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Coal  | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.69   | 0.0%      |  |
| Petroleum   | 0.01   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 14.2%     |  |
| Natural Gas   | 4.71   | 4.51   | 4.52   | 4.53   | 4.54   | 4.55   | 4.57   | 4.58   | 4.59   | 4.61   | 4.62   | 4.63   | 4.65   | 4.67   | 4.68   | 4.71   | 4.73   | 4.75   | 4.78   | 4.80   | 4.82   | 4.83   | 0.1%      |  |
| Other Gaseous Fuels                                       | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 4.0%      |  |
| Renewable   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.01   | 0.7%      |  |
| Other   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |  |
| Total   | 5.43   | 5.34   | 5.36   | 5.37   | 5.38   | 5.39   | 5.40   | 5.41   | 5.42   | 5.44   | 5.45   | 5.47   | 5.49   | 5.50   | 5.52   | 5.54   | 5.57   | 5.59   | 5.61   | 5.64   | 5.66   | 5.67   | 0.2%      |  |
| Sales to Utilities  | 3.56   | 3.45   | 3.46   | 3.46   | 3.47   | 3.48   | 3.49   | 3.50   | 3.51   | 3.52   | 3.53   | 3.54   | 3.55   | 3.56   | 3.57   | 3.58   | 3.59   | 3.60   | 3.61   | 3.62   | 3.63   | 3.64   | 0.1%      |  |
| Generation for Own Use                                    | 1.87   | 1.89   | 1.90   | 1.90   | 1.91   | 1.91   | 1.91   | 1.92   | 1.92   | 1.93   | 1.93   | 1.93   | 1.94   | 1.95   | 1.95   | 1.96   | 1.98   | 1.99   | 2.00   | 2.01   | 2.02   | 2.03   | 0.4%      |  |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Residential   | 8.5    | 8.7    | 8.6    | 8.5    | 8.5    | 8.4    | 8.4    | 8.4    | 8.5    | 8.5    | 8.5    | 8.5    | 8.5    | 8.5    | 8.6    | 8.6    | 8.5    | 8.5    | 8.4    | 8.4    | 8.3    | 8.3    | -0.1%     |  |
| Commercial  | 6.9    | 7.0    | 6.9    | 6.9    | 6.9    | 6.8    | 6.7    | 6.7    | 6.8    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.6    | 6.5    | 6.5    | 6.4    | -0.3%     |  |
| Industrial  | 4.8    | 4.9    | 4.8    | 4.8    | 4.8    | 4.6    | 4.6    | 4.6    | 4.6    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.5    | 4.4    | 4.3    | 4.3    | 4.3    | -0.6%     |  |
| Transportation  | 6.0    | 6.1    | 6.0    | 6.0    | 6.0    | 5.9    | 5.8    | 5.8    | 5.8    | 5.8    | 5.7    | 5.7    | 5.7    | 5.7    | 5.7    | 5.6    | 5.6    | 5.5    | 5.4    | 5.4    | 5.4    | 5.4    | -0.5%     |  |
| All Sectors Average                                       | 7.0    | 7.1    | 7.0    | 7.0    | 7.0    | 6.9    | 6.8    | 6.8    | 6.9    | 6.8    | 6.8    | 6.9    | 6.8    | 6.9    | 6.9    | 6.9    | 6.8    | 6.8    | 6.7    | 6.7    | 6.6    | 6.6    | -0.2%     |  |

**Table 71. Electric Power Projections for EMM Region (3 of 3)  
12 - Western Systems Coordinating Council/RA**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal                                  | 0.98   | 0.99   | 1.00   | 1.02   | 1.04   | 1.06   | 1.06   | 1.07   | 1.07   | 1.09   | 1.10   | 1.10   | 1.10   | 1.10   | 1.10   | 1.10   | 1.11   | 1.11   | 1.12   | 1.13   | 1.14   | 1.16   | 0.7%      |
| Natural Gas                           | 0.09   | 0.22   | 0.22   | 0.23   | 0.23   | 0.23   | 0.24   | 0.25   | 0.26   | 0.25   | 0.24   | 0.23   | 0.23   | 0.24   | 0.24   | 0.23   | 0.23   | 0.23   | 0.22   | 0.22   | 0.21   | 0.22   | 3.8%      |
| Oil                                   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -5.9%     |
| Total                                 | 1.08   | 1.21   | 1.22   | 1.25   | 1.27   | 1.28   | 1.31   | 1.32   | 1.34   | 1.34   | 1.34   | 1.33   | 1.34   | 1.34   | 1.34   | 1.34   | 1.34   | 1.33   | 1.34   | 1.35   | 1.35   | 1.37   | 1.1%      |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Carbon Dioxide                        | 111.26 | 114.85 | 116.84 | 119.11 | 121.02 | 122.93 | 124.52 | 125.58 | 126.85 | 127.67 | 128.02 | 127.92 | 128.38 | 128.57 | 128.73 | 128.49 | 128.62 | 128.58 | 129.44 | 130.26 | 131.14 | 133.19 | 0.8%      |
| Sulfur Dioxide                        | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.22   | 0.22   | 0.22   | 0.22   | -0.1%     |
| Nitrogen Oxide                        | 0.28   | 0.21   | 0.21   | 0.21   | 0.21   | 0.22   | 0.21   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | 0.22   | -1.1%     |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatt-hour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 72. Electric Power Projections for EMM Region (1 of 3)  
13 - Western Systems Coordinating Council/CNV**

|  | 1998         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 1998-2020   |  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--|
| <b>Electricity Generating Capacity 1/</b><br>(gigawatts) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 5.43         | 5.43         | 5.43         | 5.43         | 5.43         | 5.52         | 5.93         | 6.18         | 6.59         | 6.89         | 7.04         | 7.29         | 7.59         | 7.93         | 8.40         | 8.98         | 9.67         | 10.15        | 10.59        | 11.37        | 12.01        | 12.65        | 3.9%        |  |
| Other Fossil Steam 2/                                    | 20.40        | 20.32        | 20.32        | 20.32        | 20.24        | 20.24        | 20.24        | 20.22        | 20.14        | 20.14        | 19.98        | 19.92        | 19.90        | 19.90        | 19.90        | 19.90        | 19.90        | 19.90        | 19.90        | 19.90        | 19.90        | 19.90        | -0.1%       |  |
| Combined Cycle   | 2.29         | 2.29         | 2.29         | 2.29         | 2.60         | 4.34         | 5.44         | 6.49         | 6.82         | 7.65         | 8.28         | 8.95         | 8.98         | 9.03         | 9.17         | 9.32         | 9.64         | 9.83         | 10.08        | 10.32        | 10.45        | 10.55        | 7.2%        |  |
| Combustion Turbine/Diesel                                | 3.01         | 3.01         | 3.00         | 3.00         | 3.85         | 3.86         | 4.11         | 4.13         | 4.24         | 4.42         | 4.63         | 4.96         | 5.43         | 6.04         | 6.43         | 7.00         | 7.19         | 7.66         | 8.23         | 8.54         | 8.80         | 8.96         | 5.1%        |  |
| Nuclear Power  | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | 5.12         | N/A         |  |
| Pumped Storage/Other 3/                                  | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | 3.73         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 16.34        | 16.52        | 16.62        | 16.54        | 16.44        | 16.35        | 16.36        | 16.27        | 16.27        | 16.29        | 16.42        | 16.33        | 16.25        | 16.26        | 16.17        | 16.12        | 16.25        | 16.27        | 16.30        | 16.39        | 16.48        | 16.51        | 0.0%        |  |
| <b>Total Capability</b>                                  | <b>56.33</b> | <b>56.42</b> | <b>56.52</b> | <b>56.43</b> | <b>57.42</b> | <b>59.16</b> | <b>60.93</b> | <b>62.14</b> | <b>62.91</b> | <b>64.24</b> | <b>65.20</b> | <b>66.31</b> | <b>66.99</b> | <b>68.00</b> | <b>68.92</b> | <b>70.17</b> | <b>71.50</b> | <b>72.66</b> | <b>73.95</b> | <b>75.37</b> | <b>76.50</b> | <b>77.42</b> | <b>1.5%</b> |  |
| <b>Cumulative Planned Additions 5/</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 0.00         | 0.19         | 0.28         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | 0.30         | N/A         |  |
| <b>Total (planned)</b>                                   | <b>0.00</b>  | <b>0.19</b>  | <b>0.28</b>  | <b>0.30</b>  | <b>N/A</b>  |  |
| <b>Cumulative Unplanned Additions 5/</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal Steam   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.09         | 0.50         | 0.74         | 1.15         | 1.46         | 1.61         | 1.85         | 2.15         | 2.49         | 2.97         | 3.55         | 4.23         | 4.71         | 5.15         | 5.93         | 6.58         | 7.22         | N/A         |  |
| Other Fossil Steam 2/                                    | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Combined Cycle   | 0.00         | 0.00         | 0.00         | 0.00         | 0.31         | 2.05         | 3.15         | 4.21         | 4.53         | 5.36         | 5.99         | 6.67         | 6.70         | 6.75         | 6.88         | 7.03         | 7.36         | 7.54         | 7.79         | 8.04         | 8.16         | 8.26         | N/A         |  |
| Combustion Turbine/Diesel                                | 0.00         | 0.00         | 0.00         | 0.00         | 0.85         | 0.87         | 1.11         | 1.14         | 1.24         | 1.42         | 1.63         | 1.97         | 2.43         | 3.04         | 3.43         | 4.00         | 4.20         | 4.67         | 5.23         | 5.54         | 5.81         | 5.97         | N/A         |  |
| Nuclear Power  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Pumped Storage/Other 3/                                  | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Fuel Cells   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | N/A         |  |
| Renewable 4/   | 0.00         | 0.00         | 0.01         | 0.01         | 0.02         | 0.03         | 0.05         | 0.06         | 0.07         | 0.09         | 0.21         | 0.23         | 0.25         | 0.26         | 0.29         | 0.32         | 0.44         | 0.46         | 0.49         | 0.58         | 0.67         | 0.70         | N/A         |  |
| <b>Total (unplanned)</b>                                 | <b>0.00</b>  | <b>0.00</b>  | <b>0.01</b>  | <b>0.01</b>  | <b>1.19</b>  | <b>3.04</b>  | <b>4.81</b>  | <b>6.14</b>  | <b>6.99</b>  | <b>8.33</b>  | <b>9.45</b>  | <b>10.71</b> | <b>11.53</b> | <b>12.55</b> | <b>13.57</b> | <b>14.90</b> | <b>16.23</b> | <b>17.38</b> | <b>18.67</b> | <b>20.10</b> | <b>21.22</b> | <b>22.15</b> | <b>N/A</b>  |  |
| <b>Cumulative Total Additions</b>                        | <b>0.00</b>  | <b>0.19</b>  | <b>0.29</b>  | <b>0.31</b>  | <b>1.48</b>  | <b>3.33</b>  | <b>5.10</b>  | <b>6.44</b>  | <b>7.29</b>  | <b>8.62</b>  | <b>9.74</b>  | <b>11.01</b> | <b>11.83</b> | <b>12.84</b> | <b>13.87</b> | <b>15.19</b> | <b>16.52</b> | <b>17.68</b> | <b>18.97</b> | <b>20.39</b> | <b>21.52</b> | <b>22.45</b> | <b>N/A</b>  |  |
| <b>Cumulative Retirements</b>                            | <b>0.00</b>  | <b>0.09</b>  | <b>0.10</b>  | <b>0.21</b>  | <b>0.40</b>  | <b>0.50</b>  | <b>0.50</b>  | <b>0.63</b>  | <b>0.71</b>  | <b>0.71</b>  | <b>0.87</b>  | <b>1.03</b>  | <b>1.17</b>  | <b>1.17</b>  | <b>1.28</b>  | <b>1.35</b>  | <b>N/A</b>  |  |
| <b>Cogenerators 6/</b>                                   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| <b>Capacity</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |             |  |
| Coal   | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.40         | 0.0%        |  |
| Petroleum  | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.06         | 0.0%        |  |
| Natural Gas  | 5.55         | 5.58         | 5.60         | 5.62         | 5.63         | 5.65         | 5.67         | 5.68         | 5.70         | 5.72         | 5.74         | 5.76         | 5.79         | 5.81         | 5.83         | 5.86         | 5.89         | 5.92         | 5.96         | 5.99         | 6.02         | 6.05         | 0.4%        |  |
| Other Gaseous Fuels                                      | 0.02         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.03         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 0.04         | 3.7%        |  |
| Renewables   | 0.20         | 0.20         | 0.21         | 0.21         | 0.22         | 0.22         | 0.23         | 0.23         | 0.23         | 0.24         | 0.24         | 0.24         | 0.24         | 0.25         | 0.25         | 0.25         | 0.26         | 0.26         | 0.26         | 0.26         | 0.27         | 0.27         | 1.3%        |  |
| Other  | 0.00         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 0.01         | 3.0%        |  |
| <b>Total</b>   | <b>6.24</b>  | <b>6.28</b>  | <b>6.30</b>  | <b>6.33</b>  | <b>6.35</b>  | <b>6.37</b>  | <b>6.39</b>  | <b>6.41</b>  | <b>6.43</b>  | <b>6.46</b>  | <b>6.48</b>  | <b>6.50</b>  | <b>6.53</b>  | <b>6.56</b>  | <b>6.58</b>  | <b>6.62</b>  | <b>6.65</b>  | <b>6.69</b>  | <b>6.73</b>  | <b>6.76</b>  | <b>6.79</b>  | <b>6.82</b>  | <b>0.4%</b> |  |

**Table 72. Electric Power Projections for EMM Region (2 of 3)  
13 - Western Systems Coordinating Council/CNV**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |       |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Residential   | 81.04  | 83.02  | 84.27  | 85.27  | 86.04  | 87.20  | 88.57  | 89.82  | 90.78  | 91.84  | 93.21  | 94.60  | 95.53  | 96.48  | 97.55  | 98.82  | 100.03 | 101.10 | 102.26 | 103.39 | 104.65 | 105.87 | 107.13    | 1.2%  |
| Commercial/Other  | 99.59  | 104.79 | 106.52 | 108.91 | 110.27 | 111.83 | 113.73 | 115.61 | 117.23 | 118.96 | 120.53 | 122.02 | 123.41 | 124.68 | 125.86 | 127.05 | 128.01 | 128.81 | 129.50 | 130.10 | 130.58 | 130.97 | 131.36    | 1.3%  |
| Industrial  | 63.10  | 63.98  | 64.57  | 66.06  | 67.60  | 68.92  | 70.30  | 71.40  | 72.50  | 73.47  | 74.09  | 74.98  | 75.67  | 76.74  | 77.95  | 79.21  | 80.50  | 81.21  | 82.21  | 83.21  | 84.26  | 85.30  | 86.34     | 1.4%  |
| Transportation  | 1.83   | 1.89   | 1.94   | 1.99   | 2.20   | 2.41   | 2.59   | 2.77   | 2.92   | 3.08   | 3.23   | 3.39   | 3.55   | 3.70   | 3.85   | 4.00   | 4.08   | 4.07   | 4.06   | 4.03   | 3.99   | 3.95   | 3.91      | 3.6%  |
| Total Sales   | 245.56 | 253.68 | 257.30 | 262.23 | 266.12 | 270.35 | 275.19 | 279.60 | 283.43 | 287.34 | 291.07 | 294.99 | 298.17 | 301.60 | 305.20 | 309.08 | 312.61 | 315.19 | 318.02 | 320.73 | 323.48 | 326.08 | 328.73    | 1.3%  |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Gross International Imports                               | 0.01   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | N/A   |
| Gross International Exports                               | 1.04   | 1.19   | 1.23   | 1.27   | 1.32   | 1.36   | 1.41   | 1.46   | 1.51   | 1.56   | 1.61   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67   | 1.67      | 2.2%  |
| Gross Interregional Elec. Imports                         | 70.66  | 57.09  | 62.01  | 70.47  | 75.37  | 86.41  | 92.37  | 92.82  | 89.86  | 84.52  | 80.30  | 76.07  | 72.63  | 69.07  | 64.74  | 61.09  | 54.85  | 51.91  | 47.70  | 44.60  | 42.54  | 38.82  | 35.10     | -2.7% |
| Gross Interregional Elec. Exports                         | 13.28  | 14.57  | 11.72  | 11.19  | 10.24  | 10.23  | 8.00   | 8.01   | 8.00   | 7.36   | 6.72   | 6.08   | 5.44   | 4.80   | 4.17   | 3.53   | 2.89   | 2.25   | 1.62   | 0.98   | 0.34   | 0.02   | -25.1%    |       |
| Purchases from cogenerators 6/                            | 29.54  | 29.50  | 29.51  | 29.61  | 29.70  | 29.79  | 29.89  | 29.99  | 30.09  | 30.20  | 30.31  | 30.42  | 30.54  | 30.66  | 30.79  | 30.93  | 31.06  | 31.19  | 31.33  | 31.44  | 31.55  | 31.63  | 31.71     | 0.3%  |
| Util. Generation for Customers                            | 177.49 | 204.39 | 200.53 | 196.81 | 195.01 | 188.52 | 185.43 | 189.47 | 196.20 | 204.96 | 212.22 | 219.73 | 225.58 | 231.79 | 238.92 | 245.65 | 254.62 | 259.56 | 266.03 | 271.30 | 275.58 | 281.67 | 287.76    | 2.1%  |
| Total Net Energy for Load                                 | 263.38 | 275.21 | 279.10 | 284.42 | 288.52 | 293.13 | 298.29 | 302.81 | 306.64 | 310.76 | 314.50 | 318.47 | 321.63 | 325.05 | 328.62 | 332.48 | 335.97 | 338.74 | 341.78 | 344.69 | 347.67 | 350.44 | 353.21    | 1.3%  |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Coal  | 37.06  | 38.36  | 38.88  | 39.52  | 40.15  | 41.44  | 44.46  | 46.30  | 49.33  | 51.59  | 52.74  | 54.54  | 56.77  | 59.30  | 62.85  | 67.14  | 72.24  | 75.82  | 79.10  | 84.90  | 89.69  | 94.43  | 99.17     | 4.3%  |
| Petroleum   | 0.90   | 1.08   | 1.09   | 1.08   | 1.04   | 0.97   | 0.92   | 0.75   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.24   | 0.24      | -5.8% |
| Natural Gas   | 29.40  | 69.36  | 64.19  | 60.01  | 57.86  | 50.36  | 44.22  | 46.85  | 50.96  | 57.35  | 62.51  | 68.40  | 72.20  | 75.87  | 79.65  | 82.45  | 85.51  | 86.83  | 89.67  | 88.52  | 87.39  | 88.60  | 89.81     | 5.1%  |
| Nuclear   | 41.11  | 38.37  | 38.42  | 38.45  | 38.47  | 38.48  | 38.50  | 38.52  | 38.53  | 38.55  | 38.57  | 38.59  | 38.59  | 38.59  | 38.59  | 38.59  | 38.52  | 38.45  | 38.38  | 38.59  | 38.59  | 38.59  | 38.59     | -0.3% |
| Pumped Storage/Other 3/                                   | 3.07   | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44     | N/A   |
| Renewable 4/  | 68.61  | 60.50  | 61.25  | 61.03  | 60.71  | 60.48  | 60.56  | 60.26  | 60.27  | 60.36  | 61.30  | 61.06  | 60.87  | 60.87  | 60.68  | 60.39  | 61.27  | 61.38  | 61.52  | 62.14  | 62.76  | 62.89  | 63.02     | -0.4% |
| Total Generation  | 180.15 | 207.23 | 203.37 | 199.65 | 197.79 | 191.29 | 188.21 | 192.23 | 198.89 | 207.64 | 214.91 | 222.36 | 228.21 | 234.42 | 241.55 | 248.29 | 257.26 | 262.19 | 268.66 | 273.93 | 278.21 | 284.31 | 290.41    | 2.1%  |
| Sales to Customers  | 177.49 | 204.39 | 200.53 | 196.81 | 195.01 | 188.52 | 185.43 | 189.47 | 196.20 | 204.96 | 212.22 | 219.73 | 225.58 | 231.79 | 238.92 | 245.65 | 254.62 | 259.56 | 266.03 | 271.30 | 275.58 | 281.67 | 287.76    | 2.1%  |
| Generation for Own Use                                    | 2.66   | 2.84   | 2.84   | 2.84   | 2.78   | 2.78   | 2.78   | 2.76   | 2.69   | 2.69   | 2.69   | 2.63   | 2.63   | 2.63   | 2.63   | 2.63   | 2.63   | 2.63   | 2.63   | 2.63   | 2.63   | 2.63   | 2.63      | 0.0%  |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Coal  | 3.16   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10   | 3.10      | -0.1% |
| Petroleum   | 0.03   | 0.17   | 0.17   | 0.17   | 0.17   | 0.17   | 0.17   | 0.17   | 0.18   | 0.19   | 0.19   | 0.19   | 0.19   | 0.19   | 0.18   | 0.18   | 0.18   | 0.17   | 0.17   | 0.17   | 0.17   | 0.22   | 0.22      | 10.1% |
| Natural Gas   | 42.76  | 42.06  | 42.20  | 42.36  | 42.51  | 42.65  | 42.83  | 42.98  | 43.12  | 43.34  | 43.50  | 43.71  | 43.96  | 44.19  | 44.43  | 44.73  | 45.04  | 45.35  | 45.69  | 45.97  | 46.24  | 46.42  | 46.60     | 0.4%  |
| Other Gaseous Fuels                                       | 0.02   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.05      | 4.0%  |
| Renewable   | 1.25   | 1.08   | 1.11   | 1.13   | 1.15   | 1.18   | 1.20   | 1.22   | 1.24   | 1.25   | 1.27   | 1.29   | 1.30   | 1.31   | 1.33   | 1.35   | 1.37   | 1.38   | 1.39   | 1.40   | 1.42   | 1.44   | 1.44      | 0.6%  |
| Other   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04      | 0.4%  |
| Total   | 47.26  | 46.49  | 46.66  | 46.84  | 47.02  | 47.19  | 47.39  | 47.56  | 47.72  | 47.97  | 48.14  | 48.38  | 48.64  | 48.88  | 49.13  | 49.45  | 49.77  | 50.09  | 50.45  | 50.74  | 51.03  | 51.27  | 51.51     | 0.4%  |
| Sales to Utilities  | 29.54  | 29.50  | 29.51  | 29.61  | 29.70  | 29.79  | 29.89  | 29.99  | 30.09  | 30.20  | 30.31  | 30.42  | 30.54  | 30.66  | 30.79  | 30.93  | 31.06  | 31.19  | 31.33  | 31.44  | 31.55  | 31.63  | 31.71     | 0.3%  |
| Generation for Own Use                                    | 17.72  | 17.00  | 17.15  | 17.23  | 17.32  | 17.40  | 17.50  | 17.57  | 17.63  | 17.77  | 17.84  | 17.96  | 18.10  | 18.21  | 18.33  | 18.51  | 18.71  | 18.90  | 19.12  | 19.30  | 19.48  | 19.64  | 19.81     | 0.5%  |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Residential   | 9.9    | 9.6    | 9.5    | 9.4    | 9.5    | 9.4    | 9.3    | 9.3    | 9.5    | 9.7    | 9.7    | 9.8    | 9.9    | 9.9    | 10.0   | 10.0   | 9.9    | 10.0   | 10.0   | 9.9    | 9.9    | 9.8    | 9.8       | 0.0%  |
| Commercial  | 9.6    | 9.3    | 9.2    | 8.5    | 8.4    | 8.2    | 7.9    | 7.7    | 7.6    | 7.6    | 7.7    | 7.8    | 7.9    | 8.0    | 8.1    | 8.0    | 8.0    | 8.0    | 7.9    | 7.8    | 7.8    | 7.7    | 7.7       | -1.0% |
| Industrial  | 6.8    | 6.6    | 6.5    | 5.8    | 5.7    | 5.4    | 5.1    | 4.8    | 4.7    | 4.6    | 4.7    | 4.7    | 4.8    | 4.9    | 4.9    | 4.8    | 4.8    | 4.8    | 4.7    | 4.6    | 4.6    | 4.5    | 4.5       | -1.8% |
| Transportation  | 7.0    | 6.8    | 6.7    | 6.6    | 6.5    | 6.3    | 6.2    | 6.1    | 6.2    | 5.9    | 5.9    | 6.0    | 5.9    | 6.0    | 6.0    | 6.0    | 6.0    | 6.1    | 6.1    | 6.0    | 6.0    | 6.0    | 6.0       | -0.7% |
| All Sectors Average                                       | 9.0    | 8.7    | 8.6    | 8.1    | 8.1    | 7.9    | 7.6    | 7.4    | 7.5    | 7.5    | 7.6    | 7.6    | 7.7    | 7.8    | 7.8    | 7.8    | 7.8    | 7.7    | 7.7    | 7.6    | 7.6    | 7.5    | 7.5       | -0.8% |

**Table 72. Electric Power Projections for EMM Region (3 of 3)  
13 - Western Systems Coordinating Council/CNV**

|                                       | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |       |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|
| Fuel Consumption (quadrillion Btu) 8/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |           |       |
| Coal                                  | 0.37  | 0.41  | 0.41  | 0.42  | 0.43  | 0.44  | 0.46  | 0.48  | 0.50  | 0.52  | 0.53  | 0.55  | 0.56  | 0.58  | 0.61   | 0.64   | 0.68   | 0.71   | 0.73   | 0.78   | 0.81   | 0.85   | 3.8%      |       |
| Natural Gas                           | 0.32  | 0.71  | 0.66  | 0.61  | 0.58  | 0.45  | 0.37  | 0.37  | 0.40  | 0.45  | 0.48  | 0.52  | 0.56  | 0.59  | 0.63   | 0.65   | 0.67   | 0.67   | 0.69   | 0.67   | 0.66   | 0.66   | 3.4%      |       |
| Oil                                   | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -5.1%     |       |
| Total                                 | 0.70  | 1.13  | 1.08  | 1.04  | 1.02  | 0.90  | 0.84  | 0.86  | 0.91  | 0.97  | 1.02  | 1.07  | 1.12  | 1.18  | 1.24   | 1.29   | 1.35   | 1.39   | 1.43   | 1.45   | 1.47   | 1.51   | 3.6%      |       |
| Emissions(million short tons) 9/      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |           |       |
| Carbon Dioxide                        | 67.92 | 84.39 | 81.92 | 80.12 | 78.87 | 72.96 | 70.58 | 72.13 | 76.22 | 80.70 | 83.84 | 87.76 | 91.64 | 95.72 | 100.50 | 105.23 | 110.47 | 113.77 | 117.33 | 120.79 | 123.53 | 127.60 | 2.9%      |       |
| Sulfur Dioxide                        | 0.08  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09      | 0.3%  |
| Nitrogen Oxide                        | 0.17  | 0.12  | 0.12  | 0.12  | 0.12  | 0.11  | 0.10  | 0.10  | 0.10  | 0.11  | 0.11  | 0.11  | 0.11  | 0.12  | 0.12   | 0.12   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13   | 0.13      | -1.1% |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.

3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.

6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.

8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

O&M = Operation and maintenance.

EMM = Electricity market module.

Kwh = Kilowatthour.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 73. Electric Power Projections for EMM Region (1 of 3)  
United States Total**

|   | 1998          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 1998-2020   |  |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|--|
| <b>Electricity Generating Capacity 1/ (gigawatts)</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |  |
| Coal Steam  | 305.20        | 306.34        | 306.34        | 306.36        | 303.52        | 301.66        | 301.62        | 301.76        | 300.55        | 300.13        | 300.47        | 301.66        | 302.62        | 303.49        | 304.53        | 305.26        | 306.80        | 307.92        | 310.05        | 311.50        | 314.04        | 316.95        | 0.2%        |  |
| Other Fossil Steam 2/                                 | 138.17        | 137.03        | 137.04        | 136.87        | 130.15        | 126.93        | 125.29        | 123.01        | 120.83        | 120.65        | 120.43        | 119.52        | 119.15        | 119.04        | 118.94        | 117.37        | 117.07        | 115.65        | 114.79        | 112.87        | 112.06        | 109.87        | -1.0%       |  |
| Combined Cycle  | 19.46         | 23.33         | 25.86         | 31.60         | 35.47         | 46.42         | 55.75         | 64.14         | 69.86         | 76.18         | 87.30         | 93.05         | 100.07        | 105.80        | 111.84        | 118.74        | 124.71        | 132.76        | 139.24        | 145.54        | 150.85        | 154.64        | 9.9%        |  |
| Combustion Turbine/Diesel                             | 73.15         | 78.84         | 84.62         | 89.01         | 100.17        | 104.16        | 115.01        | 122.29        | 133.97        | 143.39        | 148.59        | 153.48        | 160.19        | 165.14        | 170.86        | 174.57        | 180.44        | 185.30        | 191.19        | 195.64        | 199.79        | 202.29        | 4.7%        |  |
| Nuclear Power   | 97.13         | 97.46         | 97.46         | 97.46         | 94.99         | 93.40         | 93.40         | 89.01         | 88.25         | 88.25         | 87.14         | 84.14         | 83.36         | 81.51         | 78.18         | 70.36         | 67.35         | 62.58         | 59.76         | 58.09         | 58.09         | 56.97         | -2.4%       |  |
| Pumped Storage/Other 3/                               | 19.85         | 19.85         | 19.89         | 19.93         | 19.98         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 20.02         | 0.0%        |  |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.01          | 0.01          | 0.02          | 0.02          | 0.03          | 0.03          | 0.04          | 0.04          | 0.05          | 0.05          | 0.05          | 0.05          | 0.05          | 0.07          | 0.07          | 0.07          | 0.07          | 0.07          | 26.6%       |  |
| Renewable 4/  | 87.19         | 88.13         | 89.29         | 89.96         | 90.27         | 90.70         | 91.13         | 91.74         | 92.20         | 93.02         | 93.54         | 93.84         | 94.25         | 94.73         | 94.76         | 95.00         | 95.33         | 95.61         | 95.84         | 96.08         | 96.37         | 96.67         | 0.5%        |  |
| <b>Total Capability</b>                               | <b>740.15</b> | <b>750.98</b> | <b>760.51</b> | <b>771.19</b> | <b>774.54</b> | <b>783.29</b> | <b>802.24</b> | <b>811.99</b> | <b>825.69</b> | <b>841.66</b> | <b>857.52</b> | <b>865.75</b> | <b>879.70</b> | <b>889.77</b> | <b>899.17</b> | <b>901.36</b> | <b>911.76</b> | <b>919.90</b> | <b>930.96</b> | <b>939.82</b> | <b>951.28</b> | <b>957.47</b> | <b>1.2%</b> |  |
| <b>Cumulative Planned Additions 5/</b>                |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |  |
| Coal Steam  | 0.00          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | 0.08          | N/A         |  |
| Other Fossil Steam 2/                                 | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |  |
| Combined Cycle  | 0.00          | 3.19          | 4.23          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | 4.69          | N/A         |  |
| Combustion Turbine/Diesel                             | 0.00          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | 1.47          | N/A         |  |
| Nuclear Power   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |  |
| Pumped Storage/Other 3/                               | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |  |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.01          | 0.01          | 0.02          | 0.02          | 0.03          | 0.03          | 0.04          | 0.04          | 0.05          | 0.05          | 0.05          | 0.05          | 0.05          | 0.07          | 0.07          | 0.07          | 0.07          | 0.07          | N/A         |  |
| Renewable 4/  | 0.00          | 0.90          | 1.28          | 1.80          | 2.02          | 2.41          | 2.67          | 3.16          | 3.54          | 4.17          | 4.46          | 4.78          | 5.17          | 5.55          | 5.55          | 5.62          | 5.73          | 5.85          | 5.85          | 5.85          | 5.92          | 5.92          | N/A         |  |
| <b>Total (planned)</b>                                | <b>0.00</b>   | <b>5.64</b>   | <b>7.06</b>   | <b>8.04</b>   | <b>8.27</b>   | <b>8.66</b>   | <b>8.93</b>   | <b>9.43</b>   | <b>9.81</b>   | <b>10.44</b>  | <b>10.74</b>  | <b>11.06</b>  | <b>11.45</b>  | <b>11.84</b>  | <b>11.84</b>  | <b>11.91</b>  | <b>12.02</b>  | <b>12.17</b>  | <b>12.17</b>  | <b>12.17</b>  | <b>12.23</b>  | <b>12.23</b>  | <b>N/A</b>  |  |
| <b>Cumulative Unplanned Additions 5/</b>              |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |  |
| Coal Steam  | 0.00          | 0.00          | 0.00          | 0.02          | 0.02          | 0.13          | 0.72          | 1.12          | 1.65          | 2.25          | 2.60          | 3.78          | 4.78          | 5.65          | 6.73          | 7.99          | 9.53          | 10.65         | 12.78         | 15.52         | 18.05         | 20.97         | N/A         |  |
| Other Fossil Steam 2/                                 | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |  |
| Combined Cycle  | 0.00          | 0.63          | 2.11          | 7.44          | 11.30         | 22.30         | 31.63         | 40.02         | 45.74         | 52.06         | 63.18         | 68.93         | 75.95         | 81.68         | 87.72         | 94.62         | 100.59        | 108.64        | 115.12        | 121.42        | 126.73        | 130.52        | N/A         |  |
| Combustion Turbine/Diesel                             | 0.00          | 4.05          | 9.86          | 14.40         | 26.16         | 30.42         | 42.19         | 49.80         | 61.50         | 71.13         | 76.37         | 81.90         | 88.72         | 93.80         | 99.51         | 103.48        | 109.35        | 114.21        | 121.24        | 125.69        | 129.83        | 132.33        | N/A         |  |
| Nuclear Power   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |  |
| Pumped Storage/Other 3/                               | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |  |
| Fuel Cells  | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |  |
| Renewable 4/  | 0.00          | 0.00          | 0.72          | 0.82          | 0.90          | 0.97          | 1.07          | 1.15          | 1.23          | 1.42          | 1.65          | 1.77          | 1.90          | 2.00          | 2.14          | 2.38          | 2.60          | 2.76          | 2.98          | 3.23          | 3.46          | 3.75          | N/A         |  |
| <b>Total (unplanned)</b>                              | <b>0.00</b>   | <b>4.68</b>   | <b>12.69</b>  | <b>22.68</b>  | <b>38.38</b>  | <b>53.83</b>  | <b>75.61</b>  | <b>92.10</b>  | <b>110.12</b> | <b>126.86</b> | <b>143.80</b> | <b>156.39</b> | <b>171.35</b> | <b>183.13</b> | <b>196.10</b> | <b>208.48</b> | <b>222.07</b> | <b>236.26</b> | <b>252.12</b> | <b>265.86</b> | <b>278.07</b> | <b>287.57</b> | <b>N/A</b>  |  |
| <b>Cumulative Total Additions</b>                     | <b>0.00</b>   | <b>10.32</b>  | <b>19.75</b>  | <b>30.72</b>  | <b>46.65</b>  | <b>62.49</b>  | <b>84.54</b>  | <b>101.52</b> | <b>119.93</b> | <b>137.30</b> | <b>154.54</b> | <b>167.45</b> | <b>182.80</b> | <b>194.97</b> | <b>207.94</b> | <b>220.39</b> | <b>234.09</b> | <b>248.42</b> | <b>264.28</b> | <b>278.03</b> | <b>290.30</b> | <b>299.80</b> | <b>N/A</b>  |  |
| <b>Cumulative Retirements</b>                         | <b>0.00</b>   | <b>1.40</b>   | <b>4.14</b>   | <b>4.62</b>   | <b>17.84</b>  | <b>25.63</b>  | <b>28.88</b>  | <b>36.25</b>  | <b>40.94</b>  | <b>42.35</b>  | <b>43.72</b>  | <b>48.41</b>  | <b>49.80</b>  | <b>51.90</b>  | <b>55.47</b>  | <b>65.73</b>  | <b>69.03</b>  | <b>75.23</b>  | <b>80.03</b>  | <b>84.92</b>  | <b>85.72</b>  | <b>89.03</b>  | <b>N/A</b>  |  |
| <b>Cogenerators 6/ Capacity</b>                       |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |  |
| Coal  | 8.78          | 8.98          | 8.98          | 8.98          | 8.98          | 8.98          | 8.98          | 8.98          | 8.98          | 8.98          | 8.98          | 8.98          | 8.97          | 8.97          | 8.97          | 8.97          | 8.97          | 8.97          | 8.97          | 8.97          | 8.97          | 8.97          | 0.1%        |  |
| Petroleum   | 1.31          | 1.31          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 1.32          | 0.0%        |  |
| Natural Gas   | 31.80         | 33.71         | 35.25         | 35.39         | 35.51         | 35.62         | 35.75         | 35.86         | 35.98         | 36.14         | 36.27         | 36.42         | 36.59         | 36.75         | 36.91         | 37.12         | 37.34         | 37.56         | 37.82         | 38.03         | 38.22         | 38.42         | 0.9%        |  |
| Other Gaseous Fuels                                   | 0.44          | 0.73          | 0.73          | 0.74          | 0.74          | 0.75          | 0.76          | 0.76          | 0.77          | 0.79          | 0.80          | 0.81          | 0.82          | 0.83          | 0.84          | 0.86          | 0.88          | 0.89          | 0.91          | 0.93          | 0.94          | 0.96          | 3.7%        |  |
| Renewables  | 7.65          | 7.73          | 7.89          | 8.04          | 8.21          | 8.38          | 8.55          | 8.69          | 8.82          | 8.96          | 9.08          | 9.21          | 9.28          | 9.37          | 9.49          | 9.64          | 9.78          | 9.88          | 9.98          | 10.08         | 10.19         | 10.31         | 1.4%        |  |
| Other   | 0.08          | 0.12          | 0.12          | 0.12          | 0.12          | 0.12          | 0.12          | 0.12          | 0.12          | 0.13          | 0.13          | 0.13          | 0.13          | 0.13          | 0.13          | 0.14          | 0.14          | 0.14          | 0.15          | 0.15          | 0.15          | 0.15          | 3.0%        |  |
| <b>Total</b>  | <b>50.06</b>  | <b>52.58</b>  | <b>54.28</b>  | <b>54.59</b>  | <b>54.88</b>  | <b>55.16</b>  | <b>55.47</b>  | <b>55.73</b>  | <b>55.99</b>  | <b>56.31</b>  | <b>56.57</b>  | <b>56.86</b>  | <b>57.12</b>  | <b>57.38</b>  | <b>57.67</b>  | <b>58.05</b>  | <b>58.44</b>  | <b>58.77</b>  | <b>59.15</b>  | <b>59.47</b>  | <b>59.79</b>  | <b>60.14</b>  | <b>0.8%</b> |  |

**Table 73. Electric Power Projections for EMM Region (2 of 3)  
United States Total**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>Electricity Demand</b><br>(billion kilowatthours)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 1119.9 | 1180.3 | 1201.6 | 1221.1 | 1239.6 | 1259.0 | 1280.2 | 1298.3 | 1316.6 | 1336.6 | 1358.9 | 1377.9 | 1395.0 | 1412.1 | 1429.3 | 1446.5 | 1463.3 | 1479.5 | 1495.5 | 1511.4 | 1529.6 | 1547.6 | 1.5%      |
| Commercial/Other  | 1039.1 | 1095.5 | 1115.9 | 1135.7 | 1151.3 | 1167.9 | 1188.0 | 1204.4 | 1221.7 | 1240.8 | 1260.9 | 1276.0 | 1295.0 | 1311.0 | 1324.2 | 1334.8 | 1342.6 | 1350.6 | 1356.8 | 1361.3 | 1366.4 | 1369.3 | 1.3%      |
| Industrial  | 1041.2 | 1057.8 | 1059.5 | 1079.9 | 1105.4 | 1125.8 | 1147.8 | 1163.4 | 1180.3 | 1194.4 | 1203.4 | 1216.0 | 1226.5 | 1242.6 | 1261.7 | 1281.5 | 1301.2 | 1313.0 | 1327.8 | 1342.3 | 1359.2 | 1376.4 | 1.3%      |
| Transportation  | 18.4   | 19.4   | 19.8   | 20.3   | 22.5   | 24.6   | 26.6   | 28.3   | 29.9   | 31.5   | 33.0   | 34.6   | 36.2   | 37.7   | 39.1   | 40.6   | 41.3   | 41.1   | 40.8   | 40.4   | 40.0   | 39.4   | 3.5%      |
| Total Sales   | 3218.5 | 3353.0 | 3396.9 | 3457.0 | 3518.9 | 3577.3 | 3642.6 | 3694.4 | 3748.5 | 3803.3 | 3856.3 | 3904.6 | 3952.7 | 4003.5 | 4054.4 | 4103.3 | 4148.4 | 4184.3 | 4220.9 | 4255.5 | 4295.2 | 4332.7 | 1.4%      |
| <b>Net Energy for Load (billion kwh) 7/</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Gross International Imports                               | 45.4   | 55.6   | 55.4   | 66.2   | 70.0   | 66.5   | 63.5   | 66.4   | 60.4   | 54.0   | 50.6   | 43.8   | 43.2   | 37.0   | 34.9   | 32.4   | 31.6   | 32.1   | 31.4   | 31.3   | 31.0   | 27.9   | -2.2%     |
| Gross International Exports                               | 15.4   | 15.0   | 15.1   | 15.2   | 20.5   | 20.6   | 20.7   | 20.8   | 21.0   | 20.0   | 19.1   | 18.1   | 17.0   | 15.9   | 14.8   | 13.7   | 12.6   | 11.5   | 10.4   | 9.3    | 8.2    | 7.7    | -3.1%     |
| Gross Interregional Elec. Imports                         | 343.5  | 331.2  | 336.7  | 344.1  | 349.2  | 354.9  | 345.2  | 339.9  | 335.5  | 322.1  | 314.4  | 298.0  | 285.6  | 273.1  | 263.0  | 247.9  | 227.3  | 223.1  | 208.1  | 195.6  | 187.7  | 182.4  | -2.8%     |
| Gross Interregional Elec. Exports                         | 346.4  | 334.4  | 340.4  | 348.0  | 353.4  | 359.3  | 349.6  | 344.3  | 339.9  | 326.3  | 318.7  | 302.1  | 289.5  | 277.1  | 267.0  | 251.8  | 230.9  | 226.9  | 211.8  | 199.3  | 191.4  | 186.1  | -2.8%     |
| Purchases from cogenerators 6/                            | 146.5  | 144.5  | 144.7  | 145.7  | 146.7  | 147.7  | 148.8  | 149.8  | 150.9  | 152.0  | 153.1  | 154.2  | 155.5  | 156.7  | 158.0  | 159.4  | 160.7  | 162.0  | 163.3  | 164.5  | 165.7  | 166.7  | 0.6%      |
| Util. Generation for Customers                            | 3277.4 | 3392.8 | 3438.7 | 3488.1 | 3551.7 | 3614.5 | 3680.4 | 3729.0 | 3788.7 | 3848.4 | 3903.6 | 3957.5 | 4003.5 | 4057.1 | 4106.8 | 4154.8 | 4206.1 | 4240.9 | 4277.6 | 4311.6 | 4351.4 | 4392.5 | 1.3%      |
| Total Net Energy for Load                                 | 3451.1 | 3574.7 | 3620.1 | 3680.9 | 3743.6 | 3803.8 | 3867.7 | 3920.0 | 3974.7 | 4030.2 | 4084.0 | 4133.3 | 4181.2 | 4230.9 | 4280.9 | 4328.9 | 4382.1 | 4419.7 | 4458.2 | 4494.5 | 4536.1 | 4575.7 | 1.3%      |
| <b>Generation by Fuel Type</b><br>(billion kilowatthours) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 1817.3 | 1879.4 | 1931.6 | 1973.3 | 2015.3 | 2058.0 | 2076.2 | 2088.9 | 2098.6 | 2109.9 | 2121.5 | 2121.5 | 2132.4 | 2143.9 | 2160.9 | 2175.0 | 2200.2 | 2210.9 | 2232.5 | 2250.4 | 2271.9 | 2295.7 | 1.1%      |
| Petroleum   | 113.8  | 83.9   | 84.5   | 73.8   | 68.1   | 64.8   | 62.3   | 64.0   | 60.2   | 56.4   | 51.1   | 48.0   | 41.4   | 40.2   | 39.6   | 39.3   | 41.0   | 39.1   | 37.6   | 37.3   | 37.3   | 37.2   | -5.0%     |
| Natural Gas   | 325.0  | 406.2  | 389.5  | 405.3  | 432.3  | 462.8  | 517.0  | 566.6  | 629.8  | 681.5  | 726.4  | 796.2  | 852.2  | 900.3  | 951.7  | 1012.8 | 1085.1 | 1129.7 | 1176.7 | 1213.2 | 1238.5 | 1256.2 | 6.3%      |
| Nuclear   | 673.7  | 688.4  | 689.9  | 691.5  | 690.7  | 680.8  | 674.4  | 656.1  | 644.1  | 642.9  | 643.1  | 627.3  | 611.8  | 604.6  | 586.5  | 559.2  | 510.6  | 490.2  | 458.1  | 437.6  | 428.9  | 427.1  | -2.1%     |
| Pumped Storage/Other 3/                                   | -2.2   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -0.9   | -3.8%     |
| Renewable 4/  | 360.0  | 348.2  | 356.8  | 359.1  | 360.2  | 363.4  | 366.1  | 369.5  | 372.3  | 374.7  | 378.4  | 381.3  | 382.4  | 384.8  | 384.8  | 385.6  | 386.3  | 388.1  | 389.8  | 390.2  | 391.8  | 393.3  | 0.4%      |
| Total Generation  | 3287.5 | 3405.2 | 3451.3 | 3502.0 | 3565.7 | 3629.0 | 3695.1 | 3744.2 | 3804.1 | 3864.4 | 3919.6 | 3973.4 | 4019.4 | 4072.9 | 4122.6 | 4171.0 | 4222.2 | 4257.0 | 4293.8 | 4327.8 | 4367.5 | 4408.6 | 1.3%      |
| Sales to Customers  | 3277.4 | 3392.8 | 3438.7 | 3488.1 | 3551.7 | 3614.5 | 3680.4 | 3729.0 | 3788.7 | 3848.4 | 3903.6 | 3957.5 | 4003.5 | 4057.1 | 4106.8 | 4154.8 | 4206.1 | 4240.9 | 4277.6 | 4311.6 | 4351.4 | 4392.5 | 1.3%      |
| Generation for Own Use                                    | 10.1   | 12.4   | 12.6   | 13.9   | 14.0   | 14.4   | 14.7   | 15.2   | 15.4   | 15.9   | 15.9   | 15.9   | 15.9   | 15.9   | 15.9   | 16.2   | 16.1   | 16.1   | 16.1   | 16.1   | 16.1   | 16.1   | 2.2%      |
| <b>Cogenerators</b>                                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal  | 52.11  | 51.17  | 51.24  | 51.29  | 51.35  | 51.40  | 51.43  | 51.40  | 51.39  | 51.37  | 51.36  | 51.33  | 51.36  | 51.35  | 51.35  | 51.34  | 51.33  | 51.31  | 51.30  | 51.29  | 51.29  | 51.29  | -0.1%     |
| Petroleum   | 7.65   | 6.11   | 6.11   | 6.12   | 6.13   | 6.13   | 6.16   | 6.17   | 6.18   | 6.23   | 6.23   | 6.25   | 6.29   | 6.31   | 6.32   | 6.37   | 6.39   | 6.42   | 6.47   | 6.49   | 6.52   | 6.59   | -0.7%     |
| Natural Gas   | 195.02 | 195.17 | 196.01 | 196.89 | 197.76 | 198.58 | 199.58 | 200.45 | 201.29 | 202.58 | 203.50 | 204.73 | 206.15 | 207.47 | 208.80 | 210.49 | 212.24 | 213.99 | 215.97 | 217.57 | 219.12 | 220.35 | 0.6%      |
| Other Gaseous Fuels                                       | 3.12   | 5.76   | 5.76   | 5.76   | 5.82   | 5.84   | 5.93   | 5.97   | 5.98   | 6.14   | 6.17   | 6.24   | 6.38   | 6.46   | 6.53   | 6.71   | 6.80   | 6.89   | 7.07   | 7.15   | 7.24   | 7.32   | 3.9%      |
| Renewable   | 47.65  | 45.48  | 46.46  | 47.34  | 48.33  | 49.25  | 50.18  | 50.91  | 51.63  | 52.32  | 52.89  | 53.57  | 53.97  | 54.52  | 55.19  | 55.98  | 56.79  | 57.31  | 57.80  | 58.30  | 58.89  | 59.55  | 1.0%      |
| Other   | 7.68   | 7.92   | 7.92   | 7.92   | 7.93   | 7.93   | 7.95   | 7.95   | 7.95   | 7.98   | 7.98   | 8.00   | 8.02   | 8.03   | 8.04   | 8.07   | 8.08   | 8.10   | 8.13   | 8.14   | 8.16   | 8.17   | 0.3%      |
| Total   | 313.24 | 311.61 | 313.51 | 315.31 | 317.31 | 319.14 | 321.22 | 322.84 | 324.42 | 326.62 | 328.13 | 330.11 | 332.17 | 334.13 | 336.23 | 338.97 | 341.63 | 344.02 | 346.73 | 348.96 | 351.22 | 353.27 | 0.5%      |
| Sales to Utilities  | 146.54 | 144.51 | 144.69 | 145.72 | 146.71 | 147.73 | 148.82 | 149.85 | 150.90 | 152.02 | 153.13 | 154.24 | 155.48 | 156.73 | 158.00 | 159.36 | 160.68 | 161.97 | 163.29 | 164.48 | 165.67 | 166.71 | 0.6%      |
| Generation for Own Use                                    | 166.70 | 167.10 | 168.82 | 169.59 | 170.60 | 171.41 | 172.40 | 173.00 | 173.51 | 174.60 | 175.00 | 175.87 | 176.70 | 177.40 | 178.23 | 179.60 | 180.95 | 182.05 | 183.44 | 184.48 | 185.55 | 186.56 | 0.5%      |
| <b>End-Use Prices</b><br>(1998 cents per kilowatthour)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential   | 8.0    | 7.9    | 7.7    | 7.6    | 7.6    | 7.6    | 7.5    | 7.5    | 7.5    | 7.5    | 7.4    | 7.4    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | -0.5%     |
| Commercial  | 7.4    | 7.2    | 7.1    | 6.9    | 6.8    | 6.7    | 6.6    | 6.6    | 6.5    | 6.4    | 6.3    | 6.4    | 6.3    | 6.2    | 6.2    | 6.3    | 6.3    | 6.2    | 6.2    | 6.2    | 6.2    | 6.2    | -0.8%     |
| Industrial  | 4.5    | 4.5    | 4.4    | 4.3    | 4.2    | 4.1    | 4.1    | 4.1    | 4.1    | 4.0    | 4.0    | 4.0    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.8    | 3.8    | -0.7%     |
| Transportation  | 5.6    | 5.4    | 5.3    | 5.2    | 5.2    | 5.1    | 5.0    | 5.0    | 4.9    | 4.9    | 4.8    | 4.8    | 4.8    | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 4.6    | 4.6    | 4.6    | 4.6    | -0.9%     |
| All Sectors Average                                       | 6.7    | 6.6    | 6.5    | 6.3    | 6.2    | 6.2    | 6.1    | 6.1    | 6.1    | 6.0    | 5.9    | 6.0    | 5.9    | 5.9    | 5.9    | 5.9    | 5.9    | 5.9    | 5.9    | 5.9    | 5.8    | 5.8    | -0.6%     |

**Table 73. Electric Power Projections for EMM Region (3 of 3)  
United States Total**

|                                       | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-<br>2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Fuel Consumption (quadrillion Btu) 8/ |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Coal                                  | 18.79  | 19.66  | 20.22  | 20.67  | 21.19  | 21.65  | 21.84  | 21.97  | 22.07  | 22.16  | 22.28  | 22.25  | 22.34  | 22.44  | 22.60  | 22.73  | 22.97  | 23.05  | 23.24  | 23.36  | 23.54  | 23.72  | 1.1%          |
| Natural Gas                           | 3.75   | 4.21   | 3.97   | 4.00   | 4.19   | 4.26   | 4.62   | 4.97   | 5.48   | 5.86   | 6.09   | 6.60   | 6.96   | 7.27   | 7.61   | 8.02   | 8.55   | 8.77   | 9.05   | 9.26   | 9.37   | 9.46   | 4.3%          |
| Oil                                   | 1.23   | 0.92   | 0.92   | 0.81   | 0.75   | 0.71   | 0.68   | 0.70   | 0.66   | 0.62   | 0.56   | 0.53   | 0.46   | 0.45   | 0.44   | 0.44   | 0.46   | 0.44   | 0.42   | 0.42   | 0.42   | 0.42   | -4.8%         |
| Total                                 | 23.77  | 24.79  | 25.11  | 25.48  | 26.12  | 26.62  | 27.15  | 27.64  | 28.21  | 28.64  | 28.93  | 29.37  | 29.76  | 30.16  | 30.65  | 31.18  | 31.97  | 32.26  | 32.71  | 33.04  | 33.33  | 33.60  | 1.6%          |
| Emissions(million short tons) 9/      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Carbon Dioxide                        | 2235.4 | 2345.9 | 2388.8 | 2427.0 | 2483.5 | 2532.5 | 2571.6 | 2606.9 | 2642.5 | 2670.9 | 2691.9 | 2714.7 | 2739.3 | 2767.0 | 2802.3 | 2838.7 | 2895.8 | 2916.2 | 2950.3 | 2975.8 | 3000.5 | 3024.4 | 1.4%          |
| Sulfur Dioxide                        | 13.04  | 11.65  | 11.35  | 11.05  | 10.85  | 10.65  | 10.38  | 10.12  | 9.76   | 9.54   | 10.26  | 9.15   | 8.95   | 8.95   | 8.95   | 8.95   | 8.95   | 8.95   | 8.95   | 8.95   | 8.95   | 8.95   | -1.7%         |
| Nitrogen Oxide                        | 5.98   | 5.03   | 5.15   | 5.23   | 5.37   | 5.45   | 5.50   | 5.54   | 5.59   | 5.63   | 5.66   | 5.66   | 5.68   | 5.71   | 5.75   | 5.79   | 5.87   | 5.88   | 5.91   | 5.91   | 5.92   | 5.93   | 0.0%          |

1/ Net summer capability is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EIA-867, "Annual Nonutility Power Producer Report, 1997." Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

2/ Includes oil-, gas-, and dual-fired capability.  
 3/ Other includes methane, propane gas, and blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.  
 4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Cumulative additions after December 31, 1999.  
 6/ Cogenerators produce electricity and another form of useful energy (such as steam or heat) through the sequential use of energy.

7/ Generation to meet system load by source.  
 8/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

9/ Estimated emissions from utilities and nonutilities (excluding cogenerators).  
 O&M = Operation and maintenance.  
 EMM = Electricity market module.  
 Kwh = Kilowatthour.  
 N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998 (except for prices and nonutility data) Energy Information Administration (EIA), Annual Energy Review 1998, DOE/EIA-0384(98) (Washington, DC, July 1999). Other 1998 and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 74. Electric Generation by Electricity Market Module Region and Source (1 of 3)  
(Billion Kwh)**

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| <b>East Central Area Reliability</b>         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coordination Agreement                       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 487.09 | 481.43 | 494.89 | 502.60 | 514.69 | 525.27 | 529.78 | 532.57 | 537.46 | 543.75 | 546.90 | 546.19 | 548.04 | 551.01 | 554.40 | 557.77 | 564.61 | 565.31 | 569.48 | 572.00 | 572.90 | 573.79 | 0.7%      |
| Petroleum                                    | 2.55   | 0.85   | 0.58   | 0.60   | 0.41   | 0.51   | 0.52   | 0.41   | 0.36   | 0.36   | 0.35   | 0.35   | 0.35   | 0.35   | 0.36   | 0.37   | 0.52   | 0.53   | 0.63   | 0.64   | 0.63   | 0.64   | -6.1%     |
| Natural Gas                                  | 4.06   | 22.16  | 17.86  | 18.89  | 19.90  | 14.49  | 21.45  | 22.31  | 31.45  | 39.33  | 46.22  | 54.97  | 62.62  | 66.71  | 70.96  | 77.23  | 90.85  | 98.49  | 114.90 | 127.88 | 136.14 | 142.32 | 17.6%     |
| Nuclear                                      | 33.46  | 51.91  | 52.15  | 52.36  | 52.57  | 52.78  | 52.99  | 53.16  | 49.93  | 48.33  | 48.60  | 48.74  | 48.93  | 49.15  | 49.22  | 49.29  | 36.43  | 35.24  | 17.74  | 6.09   | 6.09   | 6.09   | -7.5%     |
| Pumped Storage/ Other 1/                     | -1.34  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -0.01  | -19.8%    |
| Renewables 2/                                | 5.01   | 5.32   | 6.07   | 5.40   | 5.66   | 5.01   | 5.03   | 5.61   | 6.12   | 6.19   | 6.23   | 6.68   | 6.49   | 6.31   | 6.15   | 6.01   | 5.30   | 5.27   | 5.17   | 5.17   | 5.18   | 5.18   | 0.2%      |
| Total  | 530.83 | 561.66 | 571.55 | 579.85 | 593.23 | 598.05 | 609.75 | 614.05 | 625.31 | 637.95 | 648.30 | 656.92 | 666.41 | 673.52 | 681.07 | 690.66 | 697.69 | 704.84 | 707.90 | 711.78 | 720.93 | 728.01 | 1.4%      |
| <b>Electric Reliability Council of Texas</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 100.50 | 105.11 | 106.43 | 107.80 | 98.02  | 99.30  | 99.30  | 98.80  | 98.85  | 98.90  | 98.94  | 98.99  | 99.03  | 99.08  | 99.12  | 99.15  | 99.18  | 99.25  | 99.37  | 99.53  | 99.73  | 99.96  | 0.0%      |
| Petroleum                                    | 0.12   | 0.26   | 0.37   | 0.33   | 0.37   | 0.33   | 0.30   | 0.27   | 0.26   | 0.26   | 0.23   | 0.18   | 0.15   | 0.15   | 0.15   | 0.14   | 0.12   | 0.10   | 0.09   | 0.09   | 0.08   | 0.08   | -1.9%     |
| Natural Gas                                  | 99.64  | 112.95 | 112.21 | 113.41 | 126.59 | 128.72 | 134.05 | 137.52 | 141.92 | 145.24 | 149.78 | 153.92 | 158.21 | 162.67 | 167.49 | 171.31 | 175.40 | 178.74 | 181.88 | 184.55 | 187.77 | 190.65 | 3.0%      |
| Nuclear                                      | 38.69  | 34.41  | 34.64  | 34.79  | 34.87  | 34.94  | 35.01  | 35.08  | 35.15  | 35.22  | 35.29  | 35.36  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | 35.37  | -0.4%     |
| Pumped Storage/ Other 1/                     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Renewables 2/                                | 1.05   | 1.33   | 2.13   | 2.93   | 3.38   | 4.29   | 4.84   | 6.58   | 7.13   | 8.29   | 8.24   | 8.20   | 8.30   | 8.26   | 8.23   | 8.52   | 8.62   | 8.60   | 8.58   | 8.56   | 8.68   | 8.67   | 10.1%     |
| Total  | 240.00 | 254.06 | 255.78 | 259.27 | 263.22 | 267.58 | 273.49 | 278.24 | 283.31 | 287.90 | 292.49 | 296.65 | 301.07 | 305.53 | 310.35 | 314.49 | 318.69 | 322.05 | 325.29 | 328.09 | 331.63 | 334.73 | 1.5%      |
| <b>Mid-Atlantic Area Council</b>             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 111.70 | 112.00 | 114.73 | 117.50 | 121.54 | 125.62 | 126.89 | 127.90 | 128.73 | 129.43 | 129.42 | 129.57 | 129.01 | 129.45 | 129.76 | 130.91 | 131.90 | 132.13 | 132.91 | 133.30 | 134.02 | 133.96 | 0.8%      |
| Petroleum                                    | 9.30   | 5.02   | 4.04   | 3.04   | 2.62   | 2.15   | 2.14   | 1.96   | 1.67   | 1.17   | 1.08   | 1.29   | 1.09   | 1.07   | 1.01   | 1.10   | 1.12   | 0.97   | 0.95   | 0.80   | 0.81   | 0.72   | -11.0%    |
| Natural Gas                                  | 6.26   | 13.66  | 14.53  | 18.99  | 21.34  | 24.36  | 26.35  | 34.50  | 39.25  | 44.50  | 46.24  | 55.47  | 61.08  | 62.74  | 67.97  | 76.87  | 89.33  | 93.94  | 101.21 | 104.54 | 103.73 | 105.67 | 13.7%     |
| Nuclear                                      | 97.13  | 95.40  | 95.59  | 95.78  | 95.91  | 96.13  | 96.07  | 93.40  | 88.27  | 88.52  | 88.95  | 81.78  | 76.28  | 76.28  | 74.94  | 60.48  | 48.00  | 46.86  | 42.05  | 42.05  | 42.05  | 42.05  | -3.7%     |
| Pumped Storage/ Other 1/                     | -0.57  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -23.2%    |
| Renewables 2/                                | 7.22   | 8.67   | 9.21   | 9.52   | 9.74   | 10.13  | 10.20  | 10.66  | 11.24  | 11.42  | 12.45  | 13.32  | 15.17  | 17.37  | 17.79  | 17.79  | 17.79  | 18.39  | 18.53  | 18.53  | 18.52  | 18.52  | 4.4%      |
| Total  | 231.04 | 234.75 | 238.10 | 244.83 | 251.14 | 258.38 | 261.65 | 268.41 | 269.16 | 275.03 | 278.13 | 281.44 | 282.61 | 286.91 | 291.47 | 287.15 | 288.13 | 292.30 | 295.65 | 299.22 | 299.13 | 300.93 | 1.2%      |
| <b>Mid-America Interconnected Network</b>    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 136.93 | 148.80 | 156.28 | 162.12 | 169.64 | 175.89 | 177.52 | 179.28 | 180.82 | 182.44 | 183.74 | 187.32 | 191.62 | 194.72 | 200.58 | 204.40 | 207.69 | 209.34 | 211.65 | 212.36 | 217.84 | 220.52 | 2.2%      |
| Petroleum                                    | 1.07   | 0.48   | 0.45   | 0.37   | 0.36   | 0.35   | 0.34   | 0.35   | 0.35   | 0.34   | 0.46   | 0.47   | 0.52   | 0.68   | 0.84   | 0.93   | 0.88   | 0.94   | 1.00   | 1.03   | 1.00   | 0.94   | -0.6%     |
| Natural Gas                                  | 5.62   | 1.98   | 1.41   | 1.29   | 1.20   | 1.19   | 1.35   | 1.48   | 1.60   | 1.67   | 5.02   | 6.98   | 7.71   | 8.89   | 10.83  | 11.57  | 12.58  | 13.18  | 13.70  | 15.06  | 15.49  | 15.56  | 4.7%      |
| Nuclear                                      | 71.77  | 85.35  | 85.07  | 85.37  | 85.68  | 85.98  | 86.28  | 83.63  | 83.36  | 83.66  | 83.96  | 84.26  | 81.33  | 80.73  | 75.44  | 75.42  | 75.40  | 75.37  | 75.35  | 75.33  | 75.31  | 75.14  | 0.2%      |
| Pumped Storage/ Other 1/                     | -0.08  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Renewables 2/                                | 4.35   | 3.47   | 3.47   | 3.47   | 3.47   | 3.47   | 3.50   | 3.50   | 3.50   | 3.50   | 3.50   | 3.99   | 4.03   | 4.12   | 3.49   | 3.66   | 3.89   | 3.62   | 4.00   | 3.70   | 3.97   | 3.97   | -0.4%     |
| Total  | 219.67 | 240.08 | 246.68 | 252.62 | 260.35 | 266.87 | 269.00 | 268.24 | 269.61 | 271.60 | 276.67 | 283.02 | 285.20 | 289.15 | 291.19 | 295.96 | 300.43 | 302.45 | 305.70 | 307.48 | 313.61 | 316.14 | 1.7%      |
| <b>Mid-Continent Area Power Pool</b>         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 121.14 | 126.87 | 129.75 | 133.53 | 135.16 | 141.62 | 144.76 | 145.45 | 146.00 | 146.45 | 147.01 | 147.42 | 148.47 | 148.60 | 149.03 | 149.45 | 150.52 | 150.62 | 150.91 | 151.21 | 151.51 | 151.80 | 1.0%      |
| Petroleum                                    | 0.94   | 0.40   | 0.35   | 0.29   | 0.27   | 0.27   | 0.34   | 0.28   | 0.31   | 0.31   | 0.32   | 0.29   | 0.29   | 0.28   | 0.28   | 0.31   | 0.31   | 0.27   | 0.27   | 0.25   | 0.25   | 0.28   | -5.3%     |
| Natural Gas                                  | 1.79   | 2.30   | 1.44   | 1.05   | 0.96   | 2.64   | 3.43   | 5.43   | 6.12   | 7.83   | 9.73   | 12.20  | 15.33  | 17.31  | 19.66  | 22.72  | 29.19  | 31.67  | 32.79  | 34.10  | 34.16  | 34.92  | 14.5%     |
| Nuclear                                      | 25.41  | 26.28  | 26.28  | 26.28  | 25.68  | 19.87  | 18.40  | 18.36  | 18.41  | 18.39  | 18.46  | 17.70  | 13.97  | 13.97  | 12.22  | 9.50   | 8.15   | 8.15   | 8.15   | 8.15   | 8.15   | 8.15   | -5.0%     |
| Pumped Storage/ Other 1/                     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Renewables 2/                                | 14.48  | 17.97  | 19.15  | 19.83  | 19.86  | 19.90  | 19.95  | 20.00  | 20.04  | 20.09  | 20.13  | 20.16  | 20.20  | 20.22  | 20.25  | 20.27  | 20.29  | 20.31  | 20.33  | 20.33  | 20.34  | 20.35  | 1.6%      |
| Total  | 163.76 | 173.81 | 176.96 | 180.98 | 181.93 | 184.30 | 186.88 | 189.52 | 190.89 | 193.06 | 195.64 | 197.77 | 198.27 | 200.39 | 201.44 | 202.25 | 208.45 | 211.03 | 212.44 | 214.05 | 214.41 | 215.50 | 1.3%      |

**Table 74. Electric Generation by Electricity Market Module Region and Source (2 of 3)  
(Billion Kwh)**

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Northeast Power Coordinating Council/ New York               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 30.34  | 29.76  | 30.56  | 31.10  | 31.83  | 32.70  | 32.66  | 32.61  | 32.55  | 32.44  | 32.35  | 32.14  | 32.22  | 32.21  | 32.19  | 32.23  | 32.29  | 32.31  | 32.34  | 32.37  | 32.40  | 32.36  | 0.3%      |
| Petroleum  | 15.33  | 17.54  | 15.86  | 12.75  | 12.22  | 15.24  | 14.17  | 13.89  | 12.97  | 12.24  | 10.02  | 10.84  | 7.13   | 6.39   | 6.30   | 5.32   | 5.73   | 5.25   | 4.81   | 4.44   | 4.72   | 4.84   | -5.1%     |
| Natural Gas  | 21.42  | 10.02  | 9.00   | 8.43   | 8.31   | 8.89   | 12.38  | 11.83  | 18.19  | 19.49  | 25.05  | 30.85  | 36.66  | 41.73  | 44.76  | 51.15  | 55.25  | 61.67  | 62.19  | 61.91  | 62.01  | 62.11  | 5.0%      |
| Nuclear  | 31.31  | 34.48  | 34.55  | 34.54  | 33.44  | 28.47  | 28.47  | 28.43  | 28.35  | 28.27  | 27.00  | 20.48  | 20.48  | 20.48  | 20.48  | 20.48  | 15.00  | 8.42   | 8.42   | 8.42   | 8.42   | 8.42   | -5.8%     |
| Pumped Storage/ Other 1/                                     | -1.16  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Renewables 2/  | 31.38  | 19.55  | 19.72  | 20.27  | 20.72  | 21.09  | 21.44  | 22.08  | 22.24  | 22.39  | 22.54  | 22.69  | 22.38  | 22.39  | 22.40  | 22.42  | 22.44  | 22.45  | 22.46  | 22.47  | 22.47  | 22.47  | -1.5%     |
| Total  | 128.62 | 111.36 | 109.69 | 107.09 | 106.52 | 106.39 | 109.11 | 108.84 | 114.30 | 114.83 | 116.96 | 117.00 | 118.87 | 123.20 | 126.13 | 131.59 | 130.70 | 130.10 | 130.22 | 129.61 | 130.03 | 130.20 | 0.1%      |
| Northeast Power Coordinating Council/ New England            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 13.16  | 19.91  | 19.95  | 20.08  | 20.22  | 20.35  | 20.39  | 20.49  | 20.49  | 20.49  | 20.48  | 20.58  | 20.60  | 20.73  | 20.84  | 20.88  | 20.92  | 20.96  | 20.99  | 21.00  | 21.03  | 21.07  | 2.2%      |
| Petroleum  | 22.25  | 14.42  | 17.57  | 16.03  | 16.34  | 14.73  | 12.68  | 12.15  | 10.10  | 8.39   | 7.23   | 5.05   | 3.65   | 3.36   | 3.20   | 2.62   | 2.54   | 2.47   | 2.50   | 2.66   | 2.74   | 2.63   | -9.3%     |
| Natural Gas  | 11.26  | 16.50  | 16.86  | 19.56  | 19.99  | 23.37  | 27.16  | 31.96  | 35.69  | 39.67  | 42.35  | 48.10  | 52.18  | 58.06  | 61.69  | 63.92  | 66.50  | 66.28  | 66.31  | 66.14  | 66.51  | 66.23  | 8.4%      |
| Nuclear  | 20.69  | 29.19  | 29.33  | 29.44  | 29.46  | 29.48  | 29.50  | 24.61  | 24.89  | 24.96  | 25.03  | 25.10  | 25.11  | 21.08  | 16.86  | 16.86  | 16.86  | 16.86  | 16.86  | 16.86  | 16.86  | 16.86  | -0.9%     |
| Pumped Storage/ Other 1/                                     | -0.42  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | -26.7%    |
| Renewables 2/  | 11.81  | 13.29  | 13.89  | 14.23  | 14.45  | 14.66  | 14.91  | 15.26  | 15.60  | 15.94  | 16.27  | 16.50  | 16.56  | 16.60  | 16.65  | 16.81  | 17.01  | 17.05  | 17.08  | 17.11  | 17.14  | 17.16  | 1.7%      |
| Total  | 78.74  | 93.31  | 97.61  | 99.34  | 100.46 | 102.59 | 104.64 | 104.47 | 106.77 | 109.45 | 111.36 | 115.32 | 118.10 | 119.83 | 119.24 | 121.09 | 123.82 | 123.62 | 123.75 | 123.77 | 124.28 | 123.96 | 2.1%      |
| Southeastern Electric Reliability Council/ Florida           |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 60.33  | 66.51  | 66.77  | 67.81  | 69.27  | 70.31  | 70.24  | 70.14  | 70.04  | 70.34  | 70.36  | 69.49  | 69.36  | 69.34  | 69.67  | 69.98  | 70.40  | 70.78  | 71.12  | 71.71  | 72.41  | 73.46  | 0.9%      |
| Petroleum  | 40.92  | 26.36  | 26.81  | 23.47  | 19.37  | 16.83  | 16.20  | 17.96  | 17.54  | 16.61  | 15.65  | 14.12  | 12.75  | 12.57  | 12.25  | 12.74  | 13.59  | 12.96  | 12.06  | 11.74  | 11.84  | 11.60  | -5.6%     |
| Natural Gas  | 32.61  | 24.61  | 22.47  | 25.35  | 29.68  | 35.55  | 44.58  | 53.09  | 59.58  | 64.95  | 67.29  | 74.20  | 79.58  | 87.91  | 95.98  | 105.25 | 109.22 | 115.18 | 122.09 | 125.34 | 128.58 | 131.28 | 6.5%      |
| Nuclear  | 31.11  | 29.10  | 29.15  | 29.18  | 29.05  | 28.92  | 28.79  | 24.58  | 23.04  | 23.04  | 23.04  | 23.04  | 20.43  | 15.19  | 12.56  | 12.56  | 8.37   | 6.26   | 6.28   | 6.28   | 6.28   | 6.28   | -7.0%     |
| Pumped Storage/ Other 1/                                     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | N/A       |
| Renewables 2/  | 4.00   | 3.65   | 4.20   | 4.43   | 4.41   | 4.59   | 4.76   | 4.94   | 5.09   | 4.76   | 5.43   | 5.49   | 5.54   | 4.90   | 5.59   | 5.59   | 5.56   | 5.58   | 5.62   | 5.75   | 5.88   | 5.61   | 1.6%      |
| Total  | 168.98 | 150.23 | 149.41 | 150.25 | 151.78 | 156.20 | 164.56 | 170.72 | 175.30 | 179.70 | 181.77 | 186.34 | 190.27 | 195.15 | 198.68 | 206.12 | 211.33 | 212.86 | 217.15 | 220.83 | 225.00 | 228.24 | 1.4%      |
| Southeastern Electric Reliability Council/ excluding Florida |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 372.53 | 397.19 | 411.52 | 421.04 | 436.19 | 441.78 | 445.52 | 449.49 | 451.62 | 452.56 | 456.96 | 452.00 | 453.50 | 455.53 | 458.44 | 458.72 | 465.22 | 468.45 | 476.67 | 482.46 | 488.25 | 498.71 | 1.3%      |
| Petroleum  | 6.05   | 3.16   | 2.31   | 1.81   | 1.77   | 1.26   | 1.42   | 1.44   | 1.51   | 1.17   | 1.08   | 0.98   | 1.02   | 0.95   | 0.86   | 1.22   | 1.56   | 1.18   | 1.09   | 1.43   | 1.31   | 1.30   | -6.8%     |
| Natural Gas  | 12.04  | 19.54  | 17.19  | 15.89  | 16.13  | 25.05  | 33.10  | 42.09  | 52.26  | 63.09  | 71.02  | 82.73  | 92.12  | 97.92  | 104.99 | 114.53 | 123.73 | 128.91 | 133.69 | 140.57 | 143.76 | 143.38 | 11.9%     |
| Nuclear  | 204.12 | 190.37 | 190.84 | 191.19 | 191.32 | 191.37 | 185.96 | 181.83 | 179.62 | 179.36 | 179.16 | 177.14 | 173.52 | 173.22 | 172.82 | 168.52 | 157.68 | 155.04 | 147.14 | 140.58 | 136.27 | 134.57 | -1.9%     |
| Pumped Storage/ Other 1/                                     | -1.99  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -0.16  | -10.8%    |
| Renewables 2/  | 37.95  | 35.65  | 37.13  | 36.96  | 36.61  | 38.39  | 39.40  | 38.98  | 39.21  | 39.01  | 39.16  | 39.85  | 39.26  | 39.77  | 39.05  | 38.46  | 38.19  | 39.01  | 39.21  | 38.44  | 38.66  | 38.80  | 0.1%      |
| Total  | 630.70 | 645.74 | 658.82 | 666.73 | 681.87 | 697.69 | 705.23 | 713.67 | 724.07 | 735.03 | 747.21 | 752.54 | 759.25 | 767.22 | 775.99 | 781.28 | 786.22 | 792.43 | 797.63 | 803.32 | 808.08 | 816.59 | 1.2%      |
| Southwest Power Pool   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 168.71 | 181.46 | 186.38 | 191.19 | 196.08 | 197.51 | 197.79 | 198.01 | 194.27 | 191.41 | 191.40 | 191.37 | 191.15 | 191.19 | 190.99 | 191.08 | 191.21 | 191.38 | 191.61 | 191.50 | 192.04 | 192.63 | 0.6%      |
| Petroleum  | 6.52   | 7.61   | 8.30   | 7.19   | 6.53   | 5.30   | 6.27   | 7.42   | 7.74   | 7.97   | 7.07   | 6.70   | 6.64   | 6.51   | 6.40   | 6.48   | 6.46   | 6.18   | 5.90   | 5.83   | 5.42   | 5.64   | -0.7%     |
| Natural Gas  | 78.44  | 69.61  | 61.81  | 62.06  | 57.84  | 60.82  | 66.63  | 70.80  | 80.56  | 87.37  | 89.87  | 95.80  | 100.98 | 104.70 | 110.71 | 117.09 | 128.93 | 135.29 | 139.11 | 143.95 | 150.02 | 151.61 | 3.0%      |
| Nuclear  | 48.21  | 45.69  | 45.75  | 45.78  | 45.78  | 45.78  | 45.70  | 45.63  | 45.56  | 45.48  | 45.78  | 45.78  | 45.78  | 45.78  | 45.78  | 42.55  | 37.03  | 32.47  | 32.47  | 30.25  | 25.87  | 25.87  | -2.8%     |
| Pumped Storage/ Other 1/                                     | -0.09  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -0.05  | -2.9%     |
| Renewables 2/  | 9.58   | 6.63   | 7.12   | 7.15   | 7.19   | 7.22   | 7.28   | 7.33   | 7.38   | 7.43   | 7.48   | 7.52   | 7.57   | 7.60   | 7.64   | 7.67   | 7.70   | 7.73   | 7.75   | 7.77   | 7.79   | 7.81   | -0.9%     |
| Total  | 311.37 | 310.94 | 309.30 | 313.32 | 313.37 | 316.58 | 323.62 | 329.14 | 335.46 | 339.62 | 341.55 | 347.12 | 352.07 | 355.73 | 361.48 | 364.83 | 371.29 | 373.01 | 376.79 | 379.26 | 381.10 | 383.50 | 1.0%      |

**Table 74. Electric Generation by Electricity Market Module Region and Source (3 of 3)  
(Billion Kwh)**

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Western Systems Coordinating Council/ N.W. Power Pool Area               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 84.31  | 80.55  | 82.37  | 84.17  | 86.10  | 88.14  | 88.26  | 88.43  | 88.71  | 88.71  | 88.83  | 89.08  | 89.50  | 89.62  | 89.89  | 90.10  | 90.48  | 90.91  | 91.46  | 91.99  | 92.80  | 93.60  | 0.5%      |
| Petroleum  | 0.17   | 0.25   | 0.25   | 0.19   | 0.10   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.09   | 0.08   | 0.08   | 0.08   | -3.1%     |
| Natural Gas  | 11.22  | 20.26  | 25.83  | 33.72  | 44.04  | 56.63  | 67.72  | 73.72  | 75.29  | 74.81  | 76.25  | 78.56  | 79.28  | 81.10  | 82.04  | 84.25  | 84.68  | 85.64  | 85.94  | 87.68  | 90.57  | 91.16  | 10.0%     |
| Nuclear  | 6.92   | 6.75   | 6.81   | 6.89   | 6.96   | 7.03   | 7.10   | 7.18   | 7.25   | 7.32   | 7.39   | 7.46   | 7.53   | 7.61   | 7.68   | 7.76   | 7.76   | 7.75   | 7.75   | 7.75   | 7.75   | 7.75   | 0.5%      |
| Pumped Storage/ Other 1/   | 0.00   | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | -0.22  | N/A       |
| Renewables 2/  | 144.10 | 155.09 | 155.95 | 156.34 | 156.49 | 156.54 | 156.53 | 156.54 | 156.60 | 157.40 | 157.69 | 157.75 | 157.91 | 158.16 | 158.56 | 159.67 | 159.82 | 160.08 | 160.93 | 161.49 | 161.62 | 163.09 | 0.6%      |
| Total  | 246.71 | 262.68 | 270.99 | 281.09 | 293.46 | 308.21 | 319.48 | 325.74 | 327.72 | 328.11 | 330.02 | 332.72 | 334.08 | 336.36 | 338.03 | 341.65 | 342.61 | 344.25 | 345.94 | 348.79 | 352.61 | 355.47 | 1.7%      |
| West. Sys. Coordinating Council/ Rocky Mountain Power Area & Arizona     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 93.31  | 91.31  | 92.93  | 94.63  | 96.25  | 97.92  | 98.49  | 99.22  | 99.52  | 101.14 | 102.16 | 102.60 | 102.96 | 102.96 | 102.96 | 102.96 | 103.32 | 103.37 | 104.67 | 105.84 | 107.10 | 109.20 | 0.7%      |
| Petroleum  | 0.13   | 0.05   | 0.05   | 0.05   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | 0.04   | -5.5%     |
| Natural Gas  | 8.35   | 20.46  | 21.83  | 23.74  | 25.50  | 27.74  | 31.48  | 31.90  | 33.75  | 33.00  | 31.84  | 30.73  | 30.95  | 31.33  | 31.63  | 31.02  | 30.47  | 30.33  | 29.66  | 29.36  | 28.80  | 29.11  | 5.8%      |
| Nuclear  | 23.79  | 21.11  | 21.29  | 21.42  | 21.48  | 21.54  | 21.60  | 21.67  | 21.73  | 21.79  | 21.85  | 21.91  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | 21.92  | -0.4%     |
| Pumped Storage/ Other 1/   | 0.41   | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | -0.04  | N/A       |
| Renewables 2/  | 18.65  | 15.46  | 15.79  | 15.79  | 15.79  | 15.88  | 15.92  | 15.95  | 15.99  | 16.03  | 16.07  | 16.17  | 16.21  | 16.24  | 16.28  | 16.31  | 16.34  | 16.56  | 16.58  | 16.60  | 16.63  | 16.65  | -0.5%     |
| Total  | 144.63 | 148.35 | 151.86 | 155.59 | 159.03 | 163.08 | 167.49 | 168.74 | 170.98 | 171.96 | 171.92 | 171.40 | 172.04 | 172.44 | 172.78 | 172.20 | 172.05 | 172.18 | 172.83 | 173.72 | 174.45 | 176.87 | 0.9%      |
| Western Systemwms Coordinating Council/ California-Southern Nevada Power |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Coal   | 37.06  | 38.36  | 38.88  | 39.52  | 40.15  | 41.44  | 44.46  | 46.30  | 49.33  | 51.59  | 52.74  | 54.54  | 56.77  | 59.30  | 62.85  | 67.14  | 72.24  | 75.82  | 79.10  | 84.90  | 89.69  | 94.43  | 4.3%      |
| Petroleum  | 0.90   | 1.08   | 1.09   | 1.08   | 1.04   | 0.97   | 0.92   | 0.75   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.23   | 0.24   | -5.8%     |
| Natural Gas  | 29.40  | 69.36  | 64.19  | 60.01  | 57.86  | 50.36  | 44.22  | 46.85  | 50.96  | 57.35  | 62.51  | 68.40  | 72.20  | 75.87  | 79.65  | 82.45  | 85.51  | 86.83  | 89.67  | 88.52  | 87.39  | 88.60  | 5.1%      |
| Nuclear  | 41.11  | 38.37  | 38.42  | 38.45  | 38.47  | 38.48  | 38.50  | 38.52  | 38.53  | 38.55  | 38.57  | 38.59  | 38.59  | 38.59  | 38.59  | 38.52  | 38.45  | 38.38  | 38.59  | 38.59  | 38.59  | 38.59  | -0.3%     |
| Pumped Storage/ Other 1/   | 3.07   | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | -0.44  | N/A       |
| Renewables 2/  | 68.61  | 60.50  | 61.25  | 61.03  | 60.71  | 60.48  | 60.56  | 60.26  | 60.27  | 60.36  | 61.30  | 61.06  | 60.87  | 60.87  | 60.68  | 60.39  | 61.27  | 61.38  | 61.52  | 62.14  | 62.76  | 62.89  | -0.4%     |
| Total  | 180.15 | 207.23 | 203.37 | 199.65 | 197.79 | 191.29 | 188.21 | 192.23 | 198.89 | 207.64 | 214.91 | 222.36 | 228.21 | 234.42 | 241.55 | 248.29 | 257.26 | 262.19 | 268.66 | 273.93 | 278.21 | 284.31 | 2.1%      |

1/ Other includes methane, propane and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

2/ Renewables include conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

N/A = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Values represent generation for utilities and nonutilities (excluding cogenerators). Net summer capability is the steady hourly output that generating equipment is expected to supply to system load as demonstrated by tests during summer peak load. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 utility generation: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report." Other 1998 and Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 75. Electric Generation Capacity by Electricity Market Module Region and Source (1 of 3)  
(Gigawatts)**

|  | 1998          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 1998-2020   |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| <b>East Central Area Reliability</b>         |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coordination Agreement                       |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam                                   | 83.61         | 83.61         | 83.61         | 83.61         | 82.87         | 82.06         | 81.50         | 81.28         | 80.39         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | 79.87         | -0.2%       |
| Other Fossil Steam 1/                        | 3.56          | 3.56          | 3.70          | 3.70          | 3.70          | 3.70          | 3.70          | 3.70          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 3.53          | 0.0%        |
| Combined Cycle                               | 0.34          | 0.34          | 1.39          | 1.39          | 1.39          | 1.39          | 1.39          | 1.39          | 1.53          | 1.53          | 2.67          | 3.42          | 3.80          | 4.16          | 4.37          | 4.64          | 5.10          | 5.86          | 6.91          | 7.90          | 9.42          | 10.22         | 16.8%       |
| Combustion Turbine/ Diesel                   | 9.05          | 9.63          | 10.11         | 11.87         | 14.09         | 14.44         | 17.63         | 18.24         | 20.89         | 23.04         | 25.09         | 25.83         | 27.75         | 27.96         | 28.63         | 29.05         | 29.56         | 30.80         | 32.38         | 34.33         | 35.04         | 36.36         | 6.5%        |
| Nuclear Power                                | 7.59          | 7.65          | 7.65          | 7.65          | 7.65          | 7.65          | 7.65          | 7.65          | 6.89          | 6.89          | 6.89          | 6.89          | 6.89          | 6.89          | 6.89          | 6.89          | 5.89          | 4.79          | 2.81          | 0.82          | 0.82          | 0.82          | -9.6%       |
| Pumped Storage/ Other 2/                     | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | 3.28          | N/A         |
| Fuel Cells                                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable Sources 3/                         | 1.56          | 1.57          | 1.60          | 1.60          | 1.65          | 1.65          | 1.66          | 1.66          | 1.67          | 1.67          | 1.68          | 1.68          | 1.69          | 1.69          | 1.69          | 1.69          | 1.70          | 1.70          | 1.70          | 1.70          | 1.70          | 1.70          | 0.4%        |
| <b>Total</b>                                 | <b>108.99</b> | <b>109.64</b> | <b>111.34</b> | <b>113.10</b> | <b>114.63</b> | <b>114.18</b> | <b>116.80</b> | <b>117.20</b> | <b>118.18</b> | <b>119.82</b> | <b>123.00</b> | <b>124.51</b> | <b>126.81</b> | <b>127.38</b> | <b>128.26</b> | <b>127.95</b> | <b>127.82</b> | <b>127.85</b> | <b>128.49</b> | <b>131.43</b> | <b>133.67</b> | <b>135.79</b> | <b>1.0%</b> |
| <b>Electric Reliability Council of Texas</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam                                   | 14.84         | 14.84         | 14.84         | 14.84         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.40         | 13.42         | 13.44         | 13.46         | 13.49         | -0.4%       |
| Other Fossil Steam 1/                        | 29.52         | 29.32         | 29.27         | 29.20         | 28.28         | 27.05         | 26.89         | 26.21         | 24.88         | 24.78         | 24.72         | 24.62         | 24.62         | 24.52         | 24.43         | 24.13         | 23.29         | 22.52         | 21.12         | 20.43         | 19.38         |               | -1.9%       |
| Combined Cycle                               | 1.53          | 3.61          | 3.63          | 3.91          | 4.07          | 4.07          | 5.40          | 5.40          | 6.44          | 6.44          | 8.00          | 8.00          | 9.40          | 10.00         | 10.87         | 11.18         | 11.50         | 12.77         | 13.77         | 14.94         | 15.91         | 16.66         | 11.5%       |
| Combustion Turbine/ Diesel                   | 4.92          | 5.54          | 6.25          | 6.59          | 8.31          | 9.35          | 10.03         | 11.42         | 12.44         | 13.55         | 14.02         | 15.17         | 15.83         | 16.69         | 17.42         | 17.78         | 18.40         | 19.02         | 19.54         | 19.77         | 20.14         | 20.34         | 6.7%        |
| Nuclear Power                                | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | 4.80          | N/A         |
| Pumped Storage/ Other 2/                     | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Fuel Cells                                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable Sources 3/                         | 0.64          | 0.82          | 1.01          | 1.27          | 1.42          | 1.72          | 1.90          | 2.27          | 2.46          | 2.86          | 2.86          | 2.86          | 2.93          | 2.93          | 2.94          | 2.99          | 3.05          | 3.06          | 3.06          | 3.07          | 3.13          | 3.14          | 7.5%        |
| <b>Total</b>                                 | <b>56.24</b>  | <b>58.92</b>  | <b>59.79</b>  | <b>60.62</b>  | <b>60.27</b>  | <b>60.38</b>  | <b>62.42</b>  | <b>63.50</b>  | <b>64.42</b>  | <b>65.83</b>  | <b>67.80</b>  | <b>68.95</b>  | <b>70.97</b>  | <b>72.44</b>  | <b>73.94</b>  | <b>74.58</b>  | <b>75.28</b>  | <b>76.34</b>  | <b>77.11</b>  | <b>77.13</b>  | <b>77.88</b>  | <b>77.81</b>  | <b>1.5%</b> |
| <b>Mid-Atlantic Area Council</b>             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam                                   | 18.80         | 18.65         | 18.46         | 18.46         | 18.41         | 18.41         | 18.35         | 18.35         | 18.35         | 18.32         | 18.32         | 18.34         | 18.35         | 18.36         | 18.37         | 18.39         | 18.42         | 18.46         | 18.51         | 18.56         | 18.60         | 18.60         | 0.0%        |
| Other Fossil Steam 1/                        | 8.64          | 8.35          | 8.35          | 8.35          | 8.20          | 8.16          | 8.12          | 8.12          | 8.12          | 8.12          | 8.12          | 8.12          | 8.12          | 8.12          | 8.12          | 8.12          | 7.55          | 7.55          | 7.12          | 7.12          | 6.36          |               | -1.4%       |
| Combined Cycle                               | 1.95          | 2.08          | 2.27          | 3.42          | 4.21          | 5.23          | 5.34          | 6.96          | 6.96          | 7.66          | 8.54          | 8.86          | 9.52          | 9.67          | 10.21         | 10.99         | 12.04         | 12.88         | 13.61         | 14.21         | 14.21         | 14.63         | 9.6%        |
| Combustion Turbine/ Diesel                   | 8.76          | 8.93          | 9.79          | 9.88          | 10.13         | 10.25         | 10.77         | 10.94         | 11.87         | 12.54         | 12.57         | 12.66         | 12.74         | 13.03         | 13.30         | 13.47         | 14.08         | 14.12         | 15.09         | 15.09         | 15.10         | 15.10         | 2.5%        |
| Nuclear Power                                | 12.98         | 13.02         | 13.02         | 13.02         | 13.02         | 13.02         | 13.02         | 11.91         | 11.91         | 11.91         | 11.91         | 10.17         | 10.17         | 10.17         | 9.08          | 6.37          | 6.37          | 5.53          | 5.53          | 5.53          | 5.53          | 5.53          | -3.8%       |
| Pumped Storage/ Other 2/                     | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | 1.34          | N/A         |
| Fuel Cells                                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.01          | 0.01          | 0.02          | 0.02          | 0.03          | 0.04          | 0.04          | 0.04          | 0.05          | 0.05          | 0.05          | 0.05          | 0.07          | 0.07          | 0.07          | 0.07          | 0.07          | N/A         |
| Renewable Sources 3/                         | 1.70          | 1.71          | 1.77          | 1.77          | 1.80          | 1.83          | 1.86          | 1.91          | 2.01          | 2.16          | 2.37          | 2.64          | 2.96          | 3.34          | 3.34          | 3.34          | 3.34          | 3.46          | 3.46          | 3.46          | 3.46          | 3.46          | 3.3%        |
| <b>Total</b>                                 | <b>54.18</b>  | <b>54.09</b>  | <b>55.00</b>  | <b>56.24</b>  | <b>57.13</b>  | <b>58.26</b>  | <b>58.82</b>  | <b>59.56</b>  | <b>60.59</b>  | <b>62.09</b>  | <b>63.22</b>  | <b>62.17</b>  | <b>63.25</b>  | <b>64.08</b>  | <b>63.80</b>  | <b>62.06</b>  | <b>63.75</b>  | <b>63.40</b>  | <b>65.15</b>  | <b>65.37</b>  | <b>65.44</b>  | <b>65.10</b>  | <b>0.8%</b> |
| <b>Mid-America Interconnected Network</b>    |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam                                   | 27.69         | 27.66         | 27.66         | 27.66         | 27.66         | 27.66         | 27.66         | 27.66         | 27.66         | 27.70         | 27.70         | 28.44         | 28.89         | 29.26         | 29.66         | 30.07         | 30.31         | 30.44         | 30.79         | 30.65         | 31.38         | 31.65         | 0.6%        |
| Other Fossil Steam 1/                        | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 3.69          | 0.0%        |
| Combined Cycle                               | 0.31          | 0.31          | 0.31          | 0.31          | 0.31          | 0.31          | 0.42          | 0.42          | 0.42          | 0.42          | 1.78          | 2.48          | 2.97          | 3.18          | 3.67          | 3.91          | 4.06          | 4.16          | 4.47          | 4.84          | 5.03          | 5.12          | 13.5%       |
| Combustion Turbine/ Diesel                   | 7.56          | 10.33         | 11.54         | 12.75         | 14.08         | 15.28         | 16.94         | 18.36         | 20.35         | 21.43         | 21.82         | 21.94         | 22.10         | 22.25         | 22.59         | 22.39         | 22.44         | 22.74         | 22.04         | 22.32         | 22.53         | 22.59         | 5.1%        |
| Nuclear Power                                | 12.72         | 12.77         | 12.77         | 12.77         | 12.77         | 12.77         | 12.77         | 12.00         | 12.00         | 12.00         | 12.00         | 12.00         | 11.22         | 11.22         | 10.07         | 10.07         | 10.07         | 10.07         | 10.07         | 10.07         | 10.07         | 10.07         | -1.1%       |
| Pumped Storage/ Other 2/                     | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | 0.35          | N/A         |
| Fuel Cells                                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable Sources 3/                         | 0.82          | 0.84          | 0.84          | 0.84          | 0.84          | 0.84          | 0.85          | 0.85          | 0.85          | 0.85          | 0.85          | 0.85          | 0.85          | 0.85          | 0.85          | 0.85          | 0.86          | 0.87          | 0.88          | 0.88          | 0.92          | 0.93          | 0.6%        |
| <b>Total</b>                                 | <b>53.14</b>  | <b>55.95</b>  | <b>57.17</b>  | <b>58.37</b>  | <b>59.70</b>  | <b>60.90</b>  | <b>62.67</b>  | <b>63.32</b>  | <b>65.31</b>  | <b>66.44</b>  | <b>68.19</b>  | <b>69.74</b>  | <b>70.07</b>  | <b>70.80</b>  | <b>70.88</b>  | <b>71.32</b>  | <b>71.79</b>  | <b>72.32</b>  | <b>72.29</b>  | <b>72.81</b>  | <b>73.96</b>  | <b>74.40</b>  | <b>1.5%</b> |
| <b>Mid-Continent Area Power Pool</b>         |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |             |
| Coal Steam                                   | 20.86         | 21.35         | 21.35         | 21.35         | 20.73         | 20.73         | 20.73         | 20.70         | 20.70         | 20.70         | 20.70         | 20.71         | 20.72         | 20.73         | 20.74         | 20.76         | 20.78         | 20.80         | 20.83         | 20.85         | 20.88         | 20.90         | 0.0%        |
| Other Fossil Steam 1/                        | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | 0.62          | N/A         |
| Combined Cycle                               | 0.43          | 0.43          | 0.43          | 0.43          | 0.43          | 0.88          | 0.92          | 1.35          | 1.35          | 1.68          | 2.10          | 2.47          | 2.87          | 3.16          | 3.39          | 3.70          | 4.01          | 4.43          | 4.59          | 4.77          | 4.86          | 4.95          | 11.8%       |
| Combustion Turbine/ Diesel                   | 6.07          | 6.14          | 6.30          | 6.84          | 7.31          | 7.63          | 8.29          | 8.94          | 9.40          | 9.94          | 10.06         | 10.14         | 10.43         | 10.58         | 11.03         | 11.26         | 11.82         | 12.33         | 12.74         | 12.94         | 13.24         | 13.42         | 3.7%        |
| Nuclear Power                                | 3.75          | 3.79          | 3.79          | 3.79          | 3.32          | 2.54          | 2.54          | 2.54          | 2.54          | 2.54          | 2.54          | 1.96          | 1.96          | 1.96          | 1.58          | 1.04          | 1.04          | 1.04          | 1.04          | 1.04          | 1.04          | 1.04          | -5.7%       |
| Pumped Storage/ Other 2/                     | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Fuel Cells                                   | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | 0.00          | N/A         |
| Renewable Sources 3/                         | 3.74          | 4.15          | 4.32          | 4.51          | 4.52          | 4.52          | 4.53          | 4.54          | 4.55          | 4.56          | 4.56          | 4.57          | 4.58          | 4.58          | 4.58          | 4.59          | 4.59          | 4.60          | 4.60          | 4.60          | 4.60          | 4.61          | 0.9%        |
| <b>Total</b>                                 | <b>35.47</b>  | <b>36.47</b>  | <b>36.81</b>  | <b>37.53</b>  | <b>36.92</b>  | <b>36.92</b>  | <b>37.63</b>  | <b>38.68</b>  | <b>39.15</b>  | <b>40.04</b>  | <b>40.57</b>  | <b>40.46</b>  | <b>41.17</b>  | <b>41.63</b>  | <b>41.94</b>  | <b>41.97</b>  | <b>42.86</b>  | <b>43.82</b>  | <b>44.42</b>  | <b>44.82</b>  | <b>45.25</b>  | <b>45.54</b>  | <b>1.1%</b> |

**Table 75. Electric Generation Capacity by Electricity Market Module Region and Source (2 of 3)  
(Gigawatts)**

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |       |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|
| Northeast Power Coordinating Council/ New York               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Coal Steam   | 4.82   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66   | 4.66      | -0.2% |
| Other Fossil Steam 1/  | 12.33  | 12.33  | 12.33  | 12.33  | 10.74  | 9.67   | 9.20   | 8.45   | 8.45   | 8.45   | 8.45   | 8.45   | 8.45   | 8.34   | 8.34   | 7.18   | 7.18   | 7.18   | 7.18   | 7.08   | 7.08   | 7.08   | 6.70      | -2.7% |
| Combined Cycle   | 0.99   | 0.99   | 0.99   | 0.99   | 0.99   | 0.99   | 0.99   | 0.99   | 1.62   | 1.62   | 2.42   | 2.42   | 3.13   | 3.81   | 4.12   | 5.04   | 5.55   | 6.45   | 6.58   | 6.58   | 6.58   | 6.62   | 6.62      | 9.0%  |
| Combustion Turbine/ Diesel                                   | 3.71   | 3.71   | 3.71   | 3.71   | 3.71   | 3.70   | 4.46   | 4.46   | 4.85   | 5.11   | 5.35   | 6.18   | 6.47   | 6.51   | 6.60   | 6.66   | 6.67   | 6.70   | 6.70   | 6.70   | 6.70   | 6.70   | 6.70      | 2.7%  |
| Nuclear Power  | 4.96   | 4.96   | 4.96   | 4.96   | 4.03   | 4.03   | 4.03   | 4.03   | 4.03   | 4.03   | 2.93   | 2.93   | 2.93   | 2.93   | 2.93   | 2.11   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14   | 1.14      | -6.5% |
| Pumped Storage/ Other 2/                                     | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28   | 1.28      | N/A   |
| Fuel Cells   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | N/A   |
| Renewable Sources 3/   | 4.60   | 4.59   | 4.67   | 4.81   | 4.88   | 4.95   | 5.02   | 5.17   | 5.17   | 5.17   | 5.17   | 5.18   | 5.18   | 5.18   | 5.19   | 5.19   | 5.20   | 5.20   | 5.20   | 5.20   | 5.20   | 5.21   | 5.21      | 0.6%  |
| Total  | 32.69  | 32.52  | 32.59  | 32.73  | 30.28  | 29.29  | 29.63  | 29.03  | 30.06  | 30.32  | 30.26  | 31.09  | 32.09  | 32.71  | 33.10  | 32.13  | 31.67  | 32.60  | 32.73  | 32.64  | 32.64  | 32.30  | 32.30     | -0.1% |
| Northeast Power Coordinating Council/ New England            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Coal Steam   | 2.76   | 2.76   | 2.76   | 2.76   | 2.76   | 2.76   | 2.76   | 2.76   | 2.76   | 2.76   | 2.76   | 2.77   | 2.78   | 2.80   | 2.81   | 2.81   | 2.82   | 2.82   | 2.82   | 2.82   | 2.83   | 2.83   | 2.83      | 0.1%  |
| Other Fossil Steam 1/  | 8.13   | 8.03   | 8.03   | 8.03   | 7.12   | 7.12   | 7.12   | 6.92   | 6.63   | 6.63   | 6.63   | 5.83   | 5.58   | 5.58   | 5.58   | 5.58   | 5.58   | 5.58   | 5.58   | 5.58   | 5.58   | 5.58   | 5.58      | -1.7% |
| Combined Cycle   | 1.31   | 1.57   | 1.57   | 2.10   | 2.64   | 3.22   | 3.50   | 3.50   | 3.50   | 3.50   | 3.97   | 3.97   | 4.74   | 5.55   | 5.79   | 6.10   | 6.43   | 6.43   | 6.43   | 6.45   | 6.51   | 6.51   | 6.51      | 7.6%  |
| Combustion Turbine/ Diesel                                   | 1.98   | 2.18   | 2.16   | 2.17   | 2.21   | 2.21   | 2.66   | 3.47   | 4.30   | 4.95   | 5.24   | 6.06   | 6.19   | 6.20   | 6.45   | 6.58   | 6.58   | 6.58   | 6.58   | 6.58   | 6.58   | 6.58   | 6.58      | 5.6%  |
| Nuclear Power  | 4.32   | 4.32   | 4.32   | 4.32   | 4.32   | 4.32   | 4.32   | 3.45   | 3.45   | 3.45   | 3.45   | 3.45   | 3.45   | 2.28   | 2.28   | 2.28   | 2.28   | 2.28   | 2.28   | 2.28   | 2.28   | 2.28   | 2.28      | -2.9% |
| Pumped Storage/ Other 2/                                     | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66   | 1.66      | N/A   |
| Fuel Cells   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | N/A   |
| Renewable Sources 3/   | 2.98   | 3.01   | 3.13   | 3.20   | 3.25   | 3.30   | 3.36   | 3.43   | 3.51   | 3.59   | 3.66   | 3.72   | 3.73   | 3.74   | 3.74   | 3.77   | 3.82   | 3.83   | 3.83   | 3.84   | 3.84   | 3.85   | 3.85      | 1.2%  |
| Total  | 23.13  | 23.52  | 23.62  | 24.23  | 23.96  | 24.59  | 25.37  | 25.19  | 25.81  | 26.54  | 27.38  | 27.45  | 28.13  | 27.81  | 28.31  | 28.79  | 29.17  | 29.19  | 29.19  | 29.22  | 29.29  | 29.29  | 29.29     | 1.1%  |
| Southeastern Electric Reliability Council/ Florida           |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Coal Steam   | 9.46   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.74   | 9.75   | 9.76   | 9.78   | 9.82   | 9.90   | 9.97   | 10.07  | 10.07     | 0.3%  |
| Other Fossil Steam 1/  | 14.27  | 13.79  | 13.79  | 13.79  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02  | 12.02     | -0.8% |
| Combined Cycle   | 4.42   | 4.47   | 4.47   | 5.03   | 5.48   | 6.47   | 7.99   | 9.27   | 10.01  | 10.88  | 11.44  | 12.13  | 12.83  | 14.02  | 15.26  | 16.47  | 17.07  | 17.91  | 18.88  | 19.44  | 19.85  | 20.24  | 20.24     | 7.2%  |
| Combustion Turbine/ Diesel                                   | 5.52   | 5.70   | 5.71   | 5.71   | 6.30   | 6.18   | 6.11   | 6.14   | 6.46   | 6.55   | 6.69   | 6.57   | 6.92   | 7.13   | 7.32   | 7.78   | 7.88   | 7.95   | 8.17   | 8.21   | 8.38   | 8.51   | 8.51      | 2.0%  |
| Nuclear Power  | 3.89   | 3.89   | 3.89   | 3.89   | 3.89   | 3.89   | 3.89   | 3.06   | 3.06   | 3.06   | 3.06   | 3.06   | 3.06   | 2.37   | 1.68   | 1.68   | 1.68   | 0.84   | 0.84   | 0.84   | 0.84   | 0.84   | 0.84      | -6.7% |
| Pumped Storage/ Other 2/                                     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | N/A   |
| Fuel Cells   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | N/A   |
| Renewable Sources 3/   | 0.54   | 0.54   | 0.60   | 0.61   | 0.62   | 0.62   | 0.63   | 0.64   | 0.65   | 0.66   | 0.66   | 0.67   | 0.68   | 0.68   | 0.69   | 0.69   | 0.70   | 0.71   | 0.71   | 0.72   | 0.73   | 0.74   | 0.74      | 1.4%  |
| Total  | 38.10  | 38.14  | 38.20  | 38.77  | 38.04  | 38.92  | 40.38  | 40.87  | 41.95  | 42.91  | 43.63  | 44.19  | 45.25  | 45.96  | 46.70  | 48.40  | 49.12  | 49.21  | 50.45  | 51.13  | 51.78  | 52.43  | 52.43     | 1.5%  |
| Southeastern Electric Reliability Council/ excluding Florida |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |       |
| Coal Steam   | 64.52  | 65.24  | 65.44  | 65.44  | 65.44  | 64.77  | 64.86  | 64.88  | 64.60  | 64.64  | 64.68  | 64.77  | 64.88  | 64.97  | 65.09  | 64.74  | 65.15  | 65.48  | 66.38  | 66.82  | 67.46  | 68.84  | 68.84     | 0.3%  |
| Other Fossil Steam 1/  | 3.11   | 3.11   | 3.11   | 3.09   | 3.09   | 3.06   | 3.06   | 3.04   | 3.04   | 2.99   | 2.99   | 2.94   | 2.94   | 2.94   | 2.94   | 2.86   | 2.86   | 2.86   | 2.78   | 2.78   | 2.66   | 2.66   | 2.66      | -0.7% |
| Combined Cycle   | 1.82   | 2.17   | 2.17   | 2.32   | 2.32   | 4.59   | 5.96   | 7.87   | 9.74   | 11.99  | 14.06  | 15.57  | 16.62  | 17.61  | 18.49  | 19.63  | 20.35  | 21.57  | 22.56  | 23.47  | 23.86  | 24.20  | 24.20     | 12.5% |
| Combustion Turbine/ Diesel                                   | 12.41  | 12.86  | 14.03  | 14.42  | 16.08  | 16.34  | 17.67  | 19.01  | 20.39  | 21.98  | 22.82  | 23.13  | 24.72  | 26.23  | 27.88  | 28.73  | 30.88  | 31.96  | 33.21  | 34.21  | 35.54  | 35.77  | 35.77     | 4.9%  |
| Nuclear Power  | 26.92  | 26.97  | 26.97  | 26.97  | 25.91  | 25.10  | 25.10  | 24.28  | 24.28  | 24.28  | 24.28  | 23.59  | 23.59  | 23.59  | 23.59  | 21.67  | 21.67  | 20.56  | 19.73  | 18.91  | 18.91  | 17.79  | 17.79     | -1.9% |
| Pumped Storage/ Other 2/                                     | 6.68   | 6.68   | 6.72   | 6.76   | 6.80   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84   | 6.84      | 0.1%  |
| Fuel Cells   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | N/A   |
| Renewable Sources 3/   | 11.57  | 11.58  | 11.69  | 11.70  | 11.71  | 11.72  | 11.73  | 11.74  | 11.75  | 11.76  | 11.77  | 11.78  | 11.79  | 11.79  | 11.80  | 11.81  | 11.81  | 11.82  | 11.84  | 11.87  | 11.90  | 11.92  | 11.92     | 0.1%  |
| Total  | 127.02 | 128.61 | 130.14 | 130.70 | 131.34 | 132.42 | 135.22 | 137.66 | 140.64 | 144.48 | 147.44 | 148.62 | 151.38 | 153.98 | 156.64 | 156.28 | 159.57 | 161.08 | 163.34 | 164.89 | 167.17 | 168.02 | 168.02    | 1.3%  |

**Table 75. Electric Generation Capacity by Electricity Market Module Region and Source (3 of 3)  
(Gigawatts)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
| Southwest Power Pool  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Coal Steam  | 27.53 | 27.53 | 27.53 | 27.53 | 27.53 | 27.04 | 27.04 | 27.04 | 26.51 | 26.03 | 26.03 | 26.03 | 26.00 | 26.00 | 25.98 | 25.99 | 26.00 | 26.03 | 26.06 | 26.04 | 26.11 | 26.19 | -0.2%     |       |
| Other Fossil Steam 1/   | 30.58 | 30.58 | 30.50 | 30.42 | 29.36 | 28.49 | 27.53 | 26.92 | 26.61 | 26.58 | 26.58 | 26.58 | 26.58 | 26.58 | 26.58 | 26.34 | 26.34 | 26.34 | 26.34 | 26.34 | 26.34 | 26.34 | 26.34     | -0.7% |
| Combined Cycle  | 1.30  | 1.74  | 2.16  | 3.50  | 3.50  | 4.58  | 5.48  | 6.29  | 7.26  | 8.19  | 9.20  | 9.68  | 10.09 | 10.40 | 11.20 | 12.08 | 13.10 | 14.19 | 14.91 | 15.50 | 16.35 | 16.72 | 12.3%     |       |
| Combustion Turbine/ Diesel  | 5.19  | 5.40  | 6.07  | 6.07  | 7.39  | 7.87  | 9.01  | 9.19  | 10.16 | 11.25 | 11.67 | 12.21 | 12.99 | 13.90 | 14.58 | 15.22 | 16.28 | 16.80 | 17.63 | 18.05 | 18.63 | 18.86 | 6.0%      |       |
| Nuclear Power   | 5.95  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 6.03  | 5.20  | 4.26  | 4.26  | 4.26  | 3.40  | 3.40  | 3.40  | -2.5%     |       |
| Pumped Storage/ Other 2/  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | 0.50  | N/A       |       |
| Fuel Cells  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Renewable Sources 3/  | 2.84  | 2.84  | 2.92  | 2.92  | 2.93  | 2.93  | 2.95  | 2.95  | 2.96  | 2.97  | 2.98  | 2.99  | 3.00  | 3.01  | 3.02  | 3.03  | 3.04  | 3.04  | 3.05  | 3.06  | 3.06  | 3.07  | 3.07      | 0.3%  |
| Total   | 73.90 | 74.63 | 75.72 | 76.98 | 77.24 | 77.46 | 78.54 | 78.94 | 80.04 | 81.58 | 83.02 | 84.04 | 85.19 | 86.44 | 87.90 | 88.36 | 89.52 | 91.17 | 92.76 | 92.90 | 94.40 | 95.09 | 1.2%      |       |
| Western Systems Coordinating Council/ N.W. Power Pool Area                |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Coal Steam  | 11.61 | 11.61 | 11.61 | 11.61 | 11.61 | 11.61 | 11.62 | 11.65 | 11.68 | 11.68 | 11.70 | 11.73 | 11.79 | 11.80 | 11.84 | 11.88 | 11.94 | 12.01 | 12.09 | 12.16 | 12.27 | 12.37 | 0.3%      |       |
| Other Fossil Steam 1/   | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72      | N/A   |
| Combined Cycle  | 1.78  | 2.13  | 2.48  | 3.68  | 4.80  | 6.71  | 8.34  | 9.63  | 9.63  | 9.68  | 9.81  | 10.02 | 10.05 | 10.13 | 10.23 | 10.60 | 10.78 | 11.15 | 11.32 | 11.95 | 12.60 | 12.95 | 9.4%      |       |
| Combustion Turbine/ Diesel  | 1.53  | 1.88  | 2.40  | 2.47  | 2.95  | 3.29  | 3.60  | 3.60  | 3.60  | 3.60  | 3.60  | 3.60  | 3.60  | 3.60  | 3.60  | 3.60  | 3.60  | 3.60  | 3.73  | 3.74  | 3.74  | 3.74  | 4.2%      |       |
| Nuclear Power   | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | 1.17  | N/A       |       |
| Pumped Storage/ Other 2/  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | N/A       |       |
| Fuel Cells  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |       |
| Renewable Sources 3/  | 35.51 | 35.50 | 35.63 | 35.69 | 35.72 | 35.74 | 35.76 | 35.78 | 35.80 | 35.92 | 35.98 | 36.00 | 36.04 | 36.08 | 36.15 | 36.31 | 36.35 | 36.40 | 36.52 | 36.61 | 36.64 | 36.85 | 0.2%      |       |
| Total   | 52.63 | 53.34 | 54.32 | 55.66 | 57.29 | 59.56 | 61.53 | 62.86 | 62.92 | 63.08 | 63.29 | 63.56 | 63.68 | 63.82 | 64.03 | 64.60 | 64.88 | 65.36 | 65.87 | 66.67 | 67.46 | 68.11 | 1.2%      |       |
| Western Systems Coordinating Council/ Rocky Mountain Power Area & Arizona |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Coal Steam  | 13.26 | 13.26 | 13.27 | 13.28 | 13.28 | 13.30 | 13.38 | 13.48 | 13.51 | 13.73 | 13.87 | 13.93 | 13.98 | 13.98 | 13.98 | 13.98 | 14.03 | 14.03 | 14.21 | 14.37 | 14.54 | 14.82 | 0.5%      |       |
| Other Fossil Steam 1/   | 2.60  | 2.60  | 2.60  | 2.60  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | 2.37  | -0.4%     |       |
| Combined Cycle  | 0.99  | 1.19  | 1.70  | 2.23  | 2.73  | 3.65  | 4.59  | 4.59  | 4.59  | 4.94  | 5.02  | 5.08  | 5.08  | 5.08  | 5.08  | 5.08  | 5.08  | 5.12  | 5.13  | 5.18  | 5.21  | 5.26  | 7.9%      |       |
| Combustion Turbine/ Diesel  | 3.44  | 3.54  | 3.55  | 3.55  | 3.77  | 3.75  | 3.75  | 4.40  | 5.03  | 5.03  | 5.03  | 5.03  | 5.03  | 5.03  | 5.03  | 5.03  | 5.04  | 5.04  | 5.15  | 5.17  | 5.35  | 5.36  | 2.0%      |       |
| Nuclear Power   | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | 2.97  | N/A       |       |
| Pumped Storage/ Other 2/  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | 0.72  | N/A       |       |
| Fuel Cells  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |       |
| Renewable Sources 3/  | 4.36  | 4.45  | 4.50  | 4.50  | 4.50  | 4.51  | 4.52  | 4.53  | 4.54  | 4.55  | 4.56  | 4.58  | 4.59  | 4.60  | 4.61  | 4.62  | 4.63  | 4.66  | 4.67  | 4.68  | 4.68  | 4.69  | 0.3%      |       |
| Total   | 28.34 | 28.72 | 29.29 | 29.83 | 30.33 | 31.26 | 32.28 | 33.04 | 33.72 | 34.30 | 34.53 | 34.66 | 34.72 | 34.73 | 34.74 | 34.75 | 34.81 | 34.90 | 35.21 | 35.44 | 35.84 | 36.18 | 1.1%      |       |
| Western Systems Coordinating Council/ California-Southern Nevada Power    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Coal Steam  | 5.43  | 5.43  | 5.43  | 5.43  | 5.43  | 5.52  | 5.93  | 6.18  | 6.59  | 6.89  | 7.04  | 7.29  | 7.59  | 7.93  | 8.40  | 8.98  | 9.67  | 10.15 | 10.59 | 11.37 | 12.01 | 12.65 | 3.9%      |       |
| Other Fossil Steam 1/   | 20.40 | 20.32 | 20.32 | 20.32 | 20.24 | 20.24 | 20.24 | 20.22 | 20.14 | 20.14 | 19.98 | 19.92 | 19.90 | 19.90 | 19.90 | 19.90 | 19.90 | 19.90 | 19.90 | 19.90 | 19.90 | 19.90 | 19.90     | -0.1% |
| Combined Cycle  | 2.29  | 2.29  | 2.29  | 2.29  | 2.60  | 4.34  | 5.44  | 6.49  | 6.82  | 7.65  | 8.28  | 8.95  | 8.98  | 9.03  | 9.17  | 9.32  | 9.64  | 9.83  | 10.08 | 10.32 | 10.45 | 10.55 | 7.2%      |       |
| Combustion Turbine/ Diesel  | 3.01  | 3.01  | 3.00  | 3.00  | 3.85  | 3.86  | 4.11  | 4.13  | 4.24  | 4.42  | 4.63  | 4.96  | 5.43  | 6.04  | 6.43  | 7.00  | 7.19  | 7.66  | 8.23  | 8.54  | 8.80  | 8.96  | 5.1%      |       |
| Nuclear Power   | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | 5.12  | N/A       |       |
| Pumped Storage/ Other 2/  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | 3.73  | N/A       |       |
| Fuel Cells  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |       |
| Renewable Sources 3/  | 16.34 | 16.52 | 16.62 | 16.54 | 16.44 | 16.35 | 16.36 | 16.27 | 16.27 | 16.29 | 16.42 | 16.33 | 16.25 | 16.26 | 16.17 | 16.12 | 16.25 | 16.27 | 16.30 | 16.39 | 16.48 | 16.51 | 0.0%      |       |
| Total   | 56.33 | 56.42 | 56.52 | 56.43 | 57.42 | 59.16 | 60.93 | 62.14 | 62.91 | 64.24 | 65.20 | 66.31 | 66.99 | 68.00 | 68.92 | 70.17 | 71.50 | 72.66 | 73.95 | 75.37 | 76.50 | 77.42 | 1.5%      |       |

1/ Includes oil-, gas-, and dual-fired capacity.

2/ Other includes methane, propane, blast furnace gas, hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

3/ Renewable sources include conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

N/A = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Values represent generation for utilities and nonutilities (excluding cogenerators). Net summer capability is the steady hourly output that generating equipment is expected to supply to system load as demonstrated by tests during summer peak load. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 utility: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report, 1997." Other 1998 and Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.





**Table 76. Renewable Resources Consumption/Displacement by Region and Source for Electricity (3 of 3)  
(Trillion Btu)**

|                         | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-<br>2020 |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| WSSCC/ CNV              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Conventional Hydropower | 515.19 | 432.82 | 432.68 | 432.49 | 432.25 | 432.12 | 431.91 | 431.73 | 431.59 | 431.40 | 431.18 | 431.05 | 430.86 | 430.64 | 430.52 | 430.30 | 430.12 | 429.97 | 429.75 | 429.59 | 429.46 | 429.23 | -0.8%         |
| Geothermal 1/           | 269.34 | 275.29 | 297.27 | 290.16 | 283.51 | 279.06 | 282.06 | 274.28 | 274.96 | 279.39 | 307.79 | 301.46 | 297.09 | 311.32 | 292.24 | 284.08 | 310.11 | 313.12 | 317.29 | 335.36 | 352.96 | 356.69 | 1.3%          |
| MSW                     | 34.75  | 39.74  | 39.95  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 40.73  | 0.7%          |
| Biomass 2/              | 21.66  | 13.50  | 13.50  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | 13.94  | -2.0%         |
| Solar Thermal 3/        | 9.18   | 9.16   | 9.16   | 9.20   | 9.24   | 9.28   | 9.32   | 9.47   | 9.58   | 9.69   | 9.77   | 9.84   | 9.92   | 9.99   | 10.11  | 10.22  | 10.33  | 10.41  | 10.52  | 10.64  | 10.75  | 10.86  | 0.8%          |
| Solar Photovoltaic 3/   | 0.02   | 0.28   | 0.40   | 0.53   | 0.66   | 0.76   | 0.86   | 1.02   | 1.17   | 1.33   | 1.49   | 1.65   | 1.87   | 2.09   | 2.30   | 2.63   | 2.95   | 3.27   | 3.60   | 3.92   | 4.24   | 4.57   | 27.8%         |
| Wind                    | 33.41  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 37.21  | 0.5%          |
| United States           |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |               |
| Conventional Hydropower | 3256.6 | 3081.3 | 3081.8 | 3084.4 | 3087.7 | 3089.0 | 3090.3 | 3094.3 | 3093.9 | 3092.6 | 3091.4 | 3089.1 | 3087.4 | 3086.3 | 3085.3 | 3084.1 | 3083.0 | 3082.3 | 3080.6 | 3079.4 | 3078.6 | 3077.3 | -0.3%         |
| Geothermal 1/           | 394.81 | 404.88 | 439.20 | 444.67 | 443.78 | 442.88 | 446.43 | 440.04 | 441.22 | 470.76 | 507.28 | 508.83 | 511.73 | 543.94 | 527.53 | 553.10 | 584.46 | 601.69 | 633.46 | 669.64 | 691.18 | 740.15 | 2.9%          |
| MSW                     | 284.45 | 283.73 | 360.08 | 373.87 | 382.94 | 395.29 | 407.64 | 424.37 | 438.70 | 459.84 | 474.45 | 490.13 | 508.85 | 528.68 | 538.47 | 548.59 | 552.74 | 560.16 | 564.66 | 567.19 | 569.41 | 571.41 | 3.2%          |
| Biomass 2/              | 61.10  | 86.59  | 106.20 | 108.20 | 108.36 | 124.08 | 135.24 | 147.68 | 159.11 | 153.29 | 165.23 | 181.31 | 178.15 | 184.08 | 175.64 | 170.06 | 162.48 | 169.07 | 173.06 | 164.16 | 169.18 | 167.54 | 4.7%          |
| Solar Thermal 3/        | 9.18   | 9.16   | 9.19   | 9.26   | 9.33   | 9.74   | 9.81   | 9.99   | 10.46  | 10.66  | 11.07  | 11.25  | 11.45  | 11.65  | 11.92  | 12.31  | 12.58  | 12.81  | 13.08  | 13.34  | 13.61  | 13.91  | 1.9%          |
| Solar Photovoltaic 3/   | 0.03   | 0.34   | 0.47   | 0.59   | 0.96   | 1.33   | 1.81   | 2.31   | 2.81   | 3.31   | 4.06   | 4.70   | 5.48   | 6.25   | 7.03   | 7.96   | 8.87   | 9.77   | 10.70  | 11.60  | 12.50  | 13.41  | 31.8%         |
| Wind                    | 34.84  | 57.78  | 61.41  | 70.16  | 73.67  | 79.88  | 84.10  | 92.13  | 97.52  | 106.80 | 109.55 | 112.57 | 116.05 | 118.54 | 119.41 | 119.61 | 122.06 | 122.64 | 122.92 | 122.92 | 124.30 | 124.30 | 6.0%          |

1/ Includes hydrothermal resources only (hot water and steam).

2/ Include projections for energy crops beginning in 2010.

3/ Grid connected generation only.

Btu = British Thermal Unit.

MSW = Municipal solid waste.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 77. Renewable Resources, Generating Capacity by EMM Region and Source (1 of 3)  
(Gigawatts)**

|                         | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |       |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-------|
| <b>ECAR</b>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Conventional Hydropower | 1.32 | 1.33 | 1.33 | 1.33 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 0.2%      |       |
| Geothermal 1/           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A       |       |
| MSW                     | 0.07 | 0.07 | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16      | 3.7%  |
| Biomass 2/              | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16      | N/A   |
| Solar Thermal 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Solar Photovoltaic 3/   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Wind                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Total                   | 1.56 | 1.57 | 1.60 | 1.60 | 1.65 | 1.65 | 1.66 | 1.66 | 1.67 | 1.67 | 1.68 | 1.68 | 1.69 | 1.69 | 1.69 | 1.69 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70      | 0.4%  |
| <b>ERCOT</b>            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Conventional Hydropower | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51      | N/A   |
| Geothermal 1/           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| MSW                     | 0.00 | 0.00 | 0.09 | 0.14 | 0.17 | 0.22 | 0.26 | 0.33 | 0.37 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49      | 24.1% |
| Biomass 2/              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Solar Thermal 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Solar Photovoltaic 3/   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.05 | 0.05      | 17.8% |
| Wind                    | 0.12 | 0.30 | 0.40 | 0.62 | 0.73 | 0.98 | 1.12 | 1.42 | 1.57 | 1.90 | 1.90 | 1.90 | 1.96 | 1.96 | 1.96 | 1.96 | 2.02 | 2.02 | 2.02 | 2.02 | 2.09 | 2.09 | 2.09      | 14.0% |
| Total                   | 0.64 | 0.82 | 1.01 | 1.27 | 1.42 | 1.72 | 1.90 | 2.27 | 2.46 | 2.86 | 2.86 | 2.86 | 2.93 | 2.93 | 2.94 | 2.99 | 3.05 | 3.06 | 3.06 | 3.07 | 3.13 | 3.14 | 3.14      | 7.5%  |
| <b>MAAC</b>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Conventional Hydropower | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20      | N/A   |
| Geothermal 1/           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| MSW                     | 0.47 | 0.47 | 0.53 | 0.53 | 0.55 | 0.56 | 0.57 | 0.59 | 0.63 | 0.69 | 0.77 | 0.87 | 0.99 | 1.14 | 1.14 | 1.14 | 1.14 | 1.19 | 1.19 | 1.19 | 1.19 | 1.19 | 1.19      | 4.3%  |
| Biomass 2/              | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.05 | 0.06 | 0.08 | 0.12 | 0.18 | 0.26 | 0.36 | 0.48 | 0.63 | 0.63 | 0.63 | 0.63 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68      | 15.2% |
| Solar Thermal 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Solar Photovoltaic 3/   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Wind                    | 0.00 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 | 0.04 | 0.06 | 0.10 | 0.14 | 0.20 | 0.28 | 0.36 | 0.36 | 0.36 | 0.36 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39      | N/A   |
| Total                   | 1.70 | 1.71 | 1.77 | 1.77 | 1.80 | 1.83 | 1.86 | 1.91 | 2.01 | 2.16 | 2.37 | 2.64 | 2.96 | 3.34 | 3.34 | 3.34 | 3.34 | 3.46 | 3.46 | 3.46 | 3.46 | 3.46 | 3.46      | 3.3%  |
| <b>MAIN</b>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Conventional Hydropower | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68      | 0.1%  |
| Geothermal 1/           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| MSW                     | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14      | N/A   |
| Biomass 2/              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.03 | 0.04 | 0.08 | 0.08 | 0.08      | 20.0% |
| Solar Thermal 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Solar Photovoltaic 3/   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Wind                    | 0.01 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03      | 7.6%  |
| Total                   | 0.82 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.86 | 0.87 | 0.88 | 0.88 | 0.92 | 0.93 | 0.93      | 0.6%  |
| <b>MAPP</b>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Conventional Hydropower | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38 | 3.38      | 0.0%  |
| Geothermal 1/           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| MSW                     | 0.10 | 0.10 | 0.20 | 0.21 | 0.22 | 0.22 | 0.23 | 0.24 | 0.25 | 0.25 | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30      | 5.2%  |
| Biomass 2/              | 0.12 | 0.12 | 0.19 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24      | 3.2%  |
| Solar Thermal 3/        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Solar Photovoltaic 3/   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | N/A   |
| Wind                    | 0.15 | 0.55 | 0.55 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68      | 7.3%  |
| Total                   | 3.74 | 4.15 | 4.32 | 4.51 | 4.52 | 4.52 | 4.53 | 4.54 | 4.55 | 4.56 | 4.56 | 4.57 | 4.58 | 4.58 | 4.58 | 4.59 | 4.59 | 4.60 | 4.60 | 4.60 | 4.60 | 4.61 | 4.61      | 0.9%  |

**Table 77. Renewable Resources, Generating Capacity by EMM Region and Source (2 of 3)  
(Gigawatts)**

|                                     | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |       |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
| <b>NPCC/ NY</b>                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower             | 4.32  | 4.32  | 4.39  | 4.53  | 4.60  | 4.67  | 4.75  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89  | 4.89      | 0.6%  |
| Geothermal 1/                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| MSW                                 | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.26  | 0.27  | 0.27  | 0.27  | 0.28  | 0.28  | 0.28  | 0.29  | 0.29  | 0.29  | 0.29  | 0.30  | 0.30      | 0.6%  |
| Biomass 2/                          | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02      | N/A   |
| Solar Thermal 3/                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Solar Photovoltaic 3/               | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Wind                                | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Total                               | 4.60  | 4.59  | 4.67  | 4.81  | 4.88  | 4.95  | 5.02  | 5.17  | 5.17  | 5.17  | 5.17  | 5.18  | 5.18  | 5.18  | 5.19  | 5.19  | 5.20  | 5.20  | 5.20  | 5.20  | 5.20  | 5.21  | 5.21      | 0.6%  |
| <b>NPCC/ NE</b>                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower             | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76  | 1.76      | N/A   |
| Geothermal 1/                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| MSW                                 | 0.48  | 0.49  | 0.55  | 0.57  | 0.58  | 0.58  | 0.59  | 0.60  | 0.61  | 0.62  | 0.63  | 0.64  | 0.64  | 0.65  | 0.66  | 0.67  | 0.67  | 0.68  | 0.69  | 0.69  | 0.70  | 0.70  | 0.70      | 1.7%  |
| Biomass 2/                          | 0.72  | 0.73  | 0.75  | 0.76  | 0.78  | 0.79  | 0.81  | 0.83  | 0.85  | 0.87  | 0.89  | 0.90  | 0.90  | 0.90  | 0.90  | 0.91  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92      | 1.1%  |
| Solar Thermal 3/                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Solar Photovoltaic 3/               | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Wind                                | 0.01  | 0.02  | 0.07  | 0.10  | 0.13  | 0.16  | 0.20  | 0.24  | 0.29  | 0.34  | 0.38  | 0.42  | 0.42  | 0.42  | 0.42  | 0.43  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46      | 17.7% |
| Total                               | 2.98  | 3.01  | 3.13  | 3.20  | 3.25  | 3.30  | 3.36  | 3.43  | 3.51  | 3.59  | 3.66  | 3.72  | 3.73  | 3.74  | 3.74  | 3.77  | 3.82  | 3.83  | 3.83  | 3.84  | 3.84  | 3.84  | 3.85      | 1.2%  |
| <b>SERC/ STV/ Florida</b>           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower             | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05      | 0.3%  |
| Geothermal 1/                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| MSW                                 | 0.47  | 0.47  | 0.53  | 0.54  | 0.54  | 0.55  | 0.56  | 0.57  | 0.58  | 0.58  | 0.59  | 0.60  | 0.60  | 0.61  | 0.61  | 0.62  | 0.63  | 0.63  | 0.64  | 0.64  | 0.64  | 0.65  | 0.65      | 1.5%  |
| Biomass 2/                          | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04      | 1.8%  |
| Solar Thermal 3/                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Solar Photovoltaic 3/               | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Wind                                | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Total                               | 0.54  | 0.54  | 0.60  | 0.61  | 0.62  | 0.62  | 0.63  | 0.64  | 0.65  | 0.66  | 0.66  | 0.67  | 0.68  | 0.68  | 0.69  | 0.69  | 0.70  | 0.71  | 0.71  | 0.72  | 0.73  | 0.74  | 0.74      | 1.4%  |
| <b>SERC/ STV/ excluding Florida</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower             | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23 | 11.23     | 0.0%  |
| Geothermal 1/                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| MSW                                 | 0.19  | 0.19  | 0.30  | 0.31  | 0.32  | 0.33  | 0.34  | 0.35  | 0.36  | 0.37  | 0.38  | 0.39  | 0.40  | 0.40  | 0.41  | 0.42  | 0.43  | 0.43  | 0.43  | 0.43  | 0.44  | 0.44  | 0.44      | 4.0%  |
| Biomass 2/                          | 0.15  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.18  | 0.20  | 0.23  | 0.25  | 0.25      | 2.3%  |
| Solar Thermal 3/                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Solar Photovoltaic 3/               | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Wind                                | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Total                               | 11.57 | 11.58 | 11.69 | 11.70 | 11.71 | 11.72 | 11.73 | 11.74 | 11.75 | 11.76 | 11.77 | 11.78 | 11.79 | 11.79 | 11.80 | 11.81 | 11.81 | 11.82 | 11.84 | 11.87 | 11.90 | 11.92 | 11.92     | 0.1%  |
| <b>SPP</b>                          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower             | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84  | 2.84      | N/A   |
| Geothermal 1/                       | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| MSW                                 | 0.00  | 0.00  | 0.07  | 0.08  | 0.08  | 0.09  | 0.10  | 0.10  | 0.11  | 0.12  | 0.12  | 0.13  | 0.13  | 0.14  | 0.14  | 0.14  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.15  | 0.16      | N/A   |
| Biomass 2/                          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Solar Thermal 3/                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Solar Photovoltaic 3/               | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.04  | 0.04  | 0.05  | 0.05  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07      | N/A   |
| Wind                                | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Total                               | 2.84  | 2.84  | 2.92  | 2.92  | 2.93  | 2.93  | 2.95  | 2.95  | 2.96  | 2.97  | 2.98  | 2.99  | 3.00  | 3.01  | 3.02  | 3.03  | 3.04  | 3.04  | 3.05  | 3.06  | 3.06  | 3.07  | 3.07      | 0.3%  |

**Table 77. Renewable Resources, Generating Capacity by EMM Region and Source (3 of 3)  
(Gigawatts)**

|                         | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
| <b>WSSC/ NWP</b>        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower | 35.07 | 35.07 | 35.07 | 35.07 | 35.07 | 35.07 | 35.07 | 35.07 | 35.07 | 35.07 | 35.07 | 35.04 | 35.04 | 35.04 | 35.04 | 35.04 | 35.04 | 35.04 | 35.04 | 35.04 | 35.04 | 35.04 | 35.04     | 0.0%  |
| Geothermal 1/           | 0.23  | 0.23  | 0.29  | 0.34  | 0.36  | 0.36  | 0.36  | 0.36  | 0.36  | 0.47  | 0.50  | 0.52  | 0.55  | 0.58  | 0.63  | 0.77  | 0.79  | 0.82  | 0.94  | 1.01  | 1.03  | 1.22  | 1.22      | 7.8%  |
| MSW                     | 0.04  | 0.04  | 0.11  | 0.12  | 0.12  | 0.13  | 0.14  | 0.14  | 0.15  | 0.16  | 0.16  | 0.17  | 0.17  | 0.18  | 0.18  | 0.18  | 0.19  | 0.19  | 0.19  | 0.20  | 0.20  | 0.20  | 0.20      | 7.4%  |
| Biomass 2/              | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14      | N/A   |
| Solar Thermal 3/        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.07      | N/A   |
| Solar Photovoltaic 3/   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.02  | 0.02  | 0.03  | 0.04  | 0.05  | 0.06  | 0.07  | 0.08  | 0.09  | 0.10  | 0.11  | 0.11  | 0.12  | 0.13  | 0.14  | 0.15  | 0.15      | N/A   |
| Wind                    | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03      | N/A   |
| Total                   | 35.51 | 35.50 | 35.63 | 35.69 | 35.72 | 35.74 | 35.76 | 35.78 | 35.80 | 35.92 | 35.98 | 36.00 | 36.04 | 36.08 | 36.15 | 36.31 | 36.35 | 36.40 | 36.52 | 36.61 | 36.64 | 36.85 | 36.85     | 0.2%  |
| <b>WSSC/ RA</b>         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98  | 3.98      | N/A   |
| Geothermal 1/           | 0.36  | 0.36  | 0.36  | 0.36  | 0.36  | 0.37  | 0.37  | 0.37  | 0.37  | 0.37  | 0.37  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.38  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40      | 0.5%  |
| MSW                     | 0.00  | 0.00  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.08  | 0.08  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10      | 18.2% |
| Biomass 2/              | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00      | N/A   |
| Solar Thermal 3/        | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03      | N/A   |
| Solar Photovoltaic 3/   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.03  | 0.03  | 0.04  | 0.04  | 0.05  | 0.05  | 0.06  | 0.06  | 0.07  | 0.07  | 0.08  | 0.08  | 0.08      | 21.3% |
| Wind                    | 0.01  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10  | 0.10      | 12.3% |
| Total                   | 4.36  | 4.45  | 4.50  | 4.50  | 4.50  | 4.51  | 4.52  | 4.53  | 4.54  | 4.55  | 4.56  | 4.58  | 4.59  | 4.60  | 4.61  | 4.62  | 4.63  | 4.66  | 4.67  | 4.68  | 4.68  | 4.69  | 4.69      | 0.3%  |
| <b>WSSC/ CNV</b>        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37 | 11.37     | N/A   |
| Geothermal 1/           | 2.29  | 2.36  | 2.46  | 2.35  | 2.25  | 2.15  | 2.16  | 2.05  | 2.05  | 2.06  | 2.18  | 2.08  | 1.99  | 1.99  | 1.89  | 1.83  | 1.94  | 1.95  | 1.97  | 2.04  | 2.12  | 2.13  | 2.13      | -0.3% |
| MSW                     | 0.26  | 0.34  | 0.34  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35      | 1.3%  |
| Biomass 2/              | 0.39  | 0.39  | 0.39  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.40      | 0.1%  |
| Solar Thermal 3/        | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.33  | 0.34  | 0.34  | 0.34  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.36  | 0.36  | 0.36  | 0.36  | 0.37  | 0.37  | 0.37  | 0.38  | 0.6%      |       |
| Solar Photovoltaic 3/   | 0.01  | 0.01  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.04  | 0.05  | 0.06  | 0.06  | 0.07  | 0.07  | 0.08  | 0.09  | 0.10  | 0.11  | 0.12  | 0.14  | 0.15  | 0.16  | 0.17  | 0.17      | 13.7% |
| Wind                    | 1.68  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71  | 1.71      | 0.1%  |
| Total                   | 16.34 | 16.52 | 16.62 | 16.54 | 16.44 | 16.35 | 16.36 | 16.27 | 16.27 | 16.29 | 16.42 | 16.33 | 16.25 | 16.26 | 16.17 | 16.12 | 16.25 | 16.27 | 16.30 | 16.39 | 16.48 | 16.51 | 16.51     | 0.0%  |
| <b>United States</b>    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |       |
| Conventional Hydropower | 77.71 | 77.72 | 77.79 | 77.94 | 78.06 | 78.13 | 78.21 | 78.35 | 78.35 | 78.35 | 78.35 | 78.33 | 78.33 | 78.33 | 78.33 | 78.33 | 78.33 | 78.33 | 78.33 | 78.33 | 78.33 | 78.33 | 78.33     | 0.0%  |
| Geothermal 1/           | 2.89  | 2.96  | 3.11  | 3.05  | 2.97  | 2.88  | 2.89  | 2.79  | 2.79  | 2.90  | 3.05  | 2.98  | 2.91  | 2.95  | 2.90  | 2.98  | 3.11  | 3.18  | 3.31  | 3.46  | 3.55  | 3.75  | 3.75      | 1.2%  |
| MSW                     | 2.49  | 2.58  | 3.27  | 3.40  | 3.48  | 3.59  | 3.70  | 3.86  | 3.99  | 4.19  | 4.33  | 4.47  | 4.65  | 4.83  | 4.87  | 4.96  | 5.00  | 5.08  | 5.11  | 5.13  | 5.15  | 5.17  | 5.17      | 3.4%  |
| Biomass 2/              | 1.76  | 1.78  | 1.87  | 1.94  | 1.96  | 1.99  | 2.01  | 2.05  | 2.11  | 2.19  | 2.29  | 2.41  | 2.53  | 2.68  | 2.68  | 2.69  | 2.71  | 2.77  | 2.80  | 2.83  | 2.90  | 2.93  | 2.93      | 2.3%  |
| Solar Thermal 3/        | 0.33  | 0.33  | 0.33  | 0.33  | 0.34  | 0.35  | 0.35  | 0.36  | 0.37  | 0.38  | 0.39  | 0.40  | 0.40  | 0.41  | 0.42  | 0.43  | 0.44  | 0.44  | 0.45  | 0.46  | 0.47  | 0.48  | 0.48      | 1.7%  |
| Solar Photovoltaic 3/   | 0.01  | 0.01  | 0.02  | 0.02  | 0.04  | 0.05  | 0.07  | 0.09  | 0.11  | 0.13  | 0.16  | 0.19  | 0.22  | 0.25  | 0.28  | 0.31  | 0.35  | 0.38  | 0.42  | 0.45  | 0.49  | 0.52  | 0.52      | 18.4% |
| Wind                    | 1.99  | 2.74  | 2.90  | 3.27  | 3.43  | 3.71  | 3.89  | 4.24  | 4.47  | 4.87  | 4.97  | 5.07  | 5.20  | 5.29  | 5.29  | 5.30  | 5.40  | 5.42  | 5.42  | 5.42  | 5.49  | 5.49  | 5.49      | 4.7%  |
| Total                   | 87.19 | 88.13 | 89.29 | 89.96 | 90.27 | 90.70 | 91.13 | 91.74 | 92.20 | 93.02 | 93.54 | 93.84 | 94.25 | 94.73 | 94.76 | 95.00 | 95.33 | 95.61 | 95.84 | 96.08 | 96.37 | 96.67 | 96.67     | 0.5%  |

1/ Includes hydrothermal resources only (hot water and steam).

2/ Include projections for energy crops beginning in 2010.

3/ Grid connected generation only.

Btu = British Thermal Unit.

MSW = Municipal solid waste.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 78. Domestic Refinery Distillation Base Capacity, Expansion, and Utilization (1 of 1)  
(Million of Barrels per Day)**

|                        | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |       |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-------|
| PAD District I         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Base Capacity          | 1.6  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 0.3%      |       |
| Capacity Additions     | 0.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.1       | -1.4% |
| Total Capacity         | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.7  | 1.8  | 0.2%      |       |
| Utilization            | 94.0 | 92.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 94.0 | 0.0%      |       |
| PAD Districts II to IV |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Base Capacity          | 11.3 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6 | 11.6      | 0.1%  |
| Capacity Additions     | 0.3  | 0.0  | 0.0  | 0.5  | 0.7  | 0.9  | 1.1  | 1.2  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3       | 7.8%  |
| Total Capacity         | 11.6 | 11.6 | 11.6 | 12.0 | 12.3 | 12.5 | 12.7 | 12.8 | 12.8 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9      | 0.5%  |
| Utilization            | 96.8 | 96.0 | 96.0 | 94.8 | 94.4 | 94.3 | 94.6 | 95.3 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0 | 96.0      | 0.0%  |
| PAD District V         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Base Capacity          | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0       | 0.1%  |
| Capacity Additions     | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.1  | 0.1  | 0.1  | 0.1       | 4.1%  |
| Total Capacity         | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.0  | 3.1  | 3.1  | 3.1  | 3.1  | 0.2%      |       |
| Utilization            | 93.0 | 80.6 | 83.8 | 83.0 | 84.0 | 85.4 | 86.5 | 87.5 | 88.2 | 89.0 | 89.8 | 90.2 | 90.0 | 90.4 | 90.9 | 91.7 | 92.0 | 92.3 | 91.5 | 91.4 | 91.6 | 92.3 | 0.0%      |       |
| United States          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |       |
| Base Capacity          | 15.9 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3      | 0.1%  |
| Capacity Additions     | 0.4  | 0.0  | 0.0  | 0.5  | 0.7  | 0.9  | 1.1  | 1.2  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.3  | 1.4  | 1.4  | 1.4  | 1.5  | 6.1%      |       |
| Total Capacity         | 16.3 | 16.3 | 16.3 | 16.7 | 17.0 | 17.2 | 17.4 | 17.5 | 17.6 | 17.6 | 17.6 | 17.6 | 17.6 | 17.6 | 17.6 | 17.6 | 17.6 | 17.6 | 17.7 | 17.7 | 17.7 | 17.8 | 0.4%      |       |
| Utilization            | 96.0 | 92.7 | 93.5 | 92.6 | 92.5 | 92.7 | 93.2 | 93.8 | 94.4 | 94.6 | 94.7 | 94.8 | 94.8 | 94.8 | 94.9 | 95.1 | 95.1 | 95.2 | 95.0 | 95.0 | 95.0 | 95.2 | 0.0%      |       |

PAD = Petroleum Administration for Defense.

N/A = Not applicable.

Notes: The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA, Petroleum Supply Annual for 1999 data.

Source: 1998: Estimated based on biennial data from 1997 and 1999. Projections: Energy Information Administration (EIA): AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 79. Components of Selective Petroleum Product Prices (1 of 1)  
(1998 Dollars per Gallon)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| <b>Diesel</b>                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| End-User Price                              | 1.04  | 1.25  | 1.23  | 1.23  | 1.23  | 1.23  | 1.23  | 1.24  | 1.24  | 1.24  | 1.25  | 1.25  | 1.25  | 1.25  | 1.25  | 1.25  | 1.25  | 1.25  | 1.25  | 1.25  | 1.24  | 1.24  | 0.8%      |
| Federal Taxes                               | 0.24  | 0.24  | 0.23  | 0.23  | 0.22  | 0.22  | 0.22  | 0.21  | 0.21  | 0.20  | 0.20  | 0.19  | 0.19  | 0.19  | 0.18  | 0.18  | 0.17  | 0.17  | 0.16  | 0.16  | 0.15  | 0.15  | -2.2%     |
| State Taxes                                 | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | N/A       |
| Distribution Costs                          | 0.15  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | -0.3%     |
| Wholesale Price                             | 0.44  | 0.67  | 0.65  | 0.65  | 0.66  | 0.66  | 0.67  | 0.68  | 0.68  | 0.69  | 0.71  | 0.71  | 0.71  | 0.71  | 0.72  | 0.72  | 0.73  | 0.73  | 0.74  | 0.74  | 0.74  | 0.75  | 2.4%      |
| <b>Motor Gasoline</b>                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| End-User Price                              | 1.07  | 1.30  | 1.27  | 1.26  | 1.27  | 1.28  | 1.29  | 1.28  | 1.29  | 1.29  | 1.29  | 1.29  | 1.29  | 1.29  | 1.29  | 1.29  | 1.29  | 1.29  | 1.29  | 1.28  | 1.28  | 1.28  | 0.8%      |
| Federal Taxes                               | 0.18  | 0.18  | 0.17  | 0.17  | 0.17  | 0.16  | 0.16  | 0.16  | 0.15  | 0.15  | 0.15  | 0.14  | 0.14  | 0.14  | 0.14  | 0.13  | 0.13  | 0.13  | 0.12  | 0.12  | 0.12  | 0.11  | -2.3%     |
| State Taxes 1/                              | 0.22  | 0.21  | 0.21  | 0.21  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.0%      |
| Distribution Costs                          | 0.13  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.2%      |
| Wholesale Price                             | 0.53  | 0.77  | 0.74  | 0.73  | 0.74  | 0.76  | 0.77  | 0.77  | 0.78  | 0.78  | 0.78  | 0.79  | 0.79  | 0.79  | 0.80  | 0.80  | 0.80  | 0.80  | 0.81  | 0.81  | 0.81  | 0.81  | 1.9%      |
| <b>Jet Fuel</b>                             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| End-User Price                              | 0.55  | 0.72  | 0.70  | 0.71  | 0.71  | 0.72  | 0.73  | 0.74  | 0.75  | 0.76  | 0.78  | 0.78  | 0.78  | 0.78  | 0.78  | 0.78  | 0.80  | 0.80  | 0.80  | 0.80  | 0.80  | 0.80  | 1.7%      |
| Federal Taxes                               | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | -2.2%     |
| State Taxes                                 | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | N/A       |
| Distribution Costs 2/                       | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 2.2%      |
| Wholesale Price                             | 0.49  | 0.67  | 0.65  | 0.66  | 0.66  | 0.67  | 0.68  | 0.69  | 0.70  | 0.72  | 0.73  | 0.73  | 0.73  | 0.73  | 0.74  | 0.74  | 0.75  | 0.76  | 0.76  | 0.76  | 0.76  | 0.76  | 2.0%      |
| <b>Residual Distillate Fuel/Heating Oil</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| End-User Price                              | 0.85  | 1.05  | 1.03  | 1.03  | 1.04  | 1.04  | 1.05  | 1.05  | 1.06  | 1.06  | 1.07  | 1.07  | 1.07  | 1.08  | 1.08  | 1.08  | 1.08  | 1.09  | 1.08  | 1.09  | 1.09  | 1.09  | 1.2%      |
| Distribution Costs                          | 0.41  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | 0.39  | -0.2%     |
| Wholesale Price                             | 0.44  | 0.66  | 0.64  | 0.64  | 0.65  | 0.65  | 0.66  | 0.66  | 0.67  | 0.67  | 0.68  | 0.68  | 0.68  | 0.68  | 0.68  | 0.68  | 0.69  | 0.69  | 0.69  | 0.70  | 0.70  | 0.71  | 2.2%      |
| World Oil Price                             | 0.29  | 0.50  | 0.48  | 0.48  | 0.48  | 0.49  | 0.49  | 0.49  | 0.49  | 0.50  | 0.50  | 0.50  | 0.50  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.52  | 0.52  | 0.52  | 0.52  | 2.8%      |

1/ Includes a 2 cent average local tax.

2/ Distribution costs are estimated as the average difference between wholesale and end-user prices. These costs are often negative for jet fuel because large bulk sales to airlines (end-users) are often cheaper than smaller sales to wholesale distributors.

N/A = Not applicable.

Notes: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) form EI-782A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report"; and EI-782B, "Resellers/Retailers' Monthly Petroleum Product Sales Report."

1998 diesel and gasoline taxes: Federal Highway Administration, Table MF-121T, <http://www.fhwa.dot.gov/ohim/mmfr/mmfrpage.htm>, March 1999. 1998 Jet Fuel taxes: EIA, Office of Oil and Gas. 1998 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 80. Lower 48 Crude Oil Production and Wellhead Prices by Supply Region (1 of 1)**

|  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--|
| Production 1/<br>(million barrels per day) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |  |
| Lower 48 Total                             | 5.08  | 5.01  | 4.73  | 4.59  | 4.49  | 4.43  | 4.40  | 4.38  | 4.36  | 4.35  | 4.35  | 4.36  | 4.39  | 4.43  | 4.47  | 4.52  | 4.57  | 4.62  | 4.67  | 4.71  | 4.74  | 4.75  | -0.3%     |  |
| Lower 48 Onshore                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |  |
| Northeast                                  | 0.10  | 0.10  | 0.08  | 0.07  | 0.07  | 0.06  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | 0.07  | -1.6%     |  |
| Gulf Coast                                 | 0.85  | 0.79  | 0.74  | 0.70  | 0.67  | 0.64  | 0.62  | 0.59  | 0.54  | 0.48  | 0.43  | 0.38  | 0.35  | 0.32  | 0.30  | 0.28  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | -5.0%     |  |
| Midcontinent                               | 0.37  | 0.34  | 0.32  | 0.30  | 0.29  | 0.29  | 0.30  | 0.31  | 0.33  | 0.36  | 0.38  | 0.40  | 0.42  | 0.43  | 0.45  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.46  | 0.45  | 0.8%      |  |
| Southwest                                  | 1.11  | 1.05  | 1.03  | 1.04  | 1.04  | 1.05  | 1.06  | 1.08  | 1.10  | 1.13  | 1.16  | 1.19  | 1.22  | 1.24  | 1.26  | 1.29  | 1.31  | 1.33  | 1.34  | 1.36  | 1.37  | 1.38  | 1.0%      |  |
| Rocky Mountain                             | 0.45  | 0.42  | 0.41  | 0.40  | 0.40  | 0.39  | 0.38  | 0.38  | 0.38  | 0.38  | 0.39  | 0.39  | 0.40  | 0.41  | 0.41  | 0.42  | 0.43  | 0.44  | 0.45  | 0.46  | 0.47  | 0.48  | 0.3%      |  |
| West Coast                                 | 0.72  | 0.67  | 0.64  | 0.62  | 0.61  | 0.60  | 0.59  | 0.59  | 0.59  | 0.59  | 0.59  | 0.59  | 0.59  | 0.60  | 0.61  | 0.62  | 0.63  | 0.64  | 0.65  | 0.65  | 0.65  | 0.64  | -0.6%     |  |
| Lower 48 Offshore                          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |  |
| Gulf                                       | 1.29  | 1.48  | 1.36  | 1.33  | 1.31  | 1.29  | 1.27  | 1.26  | 1.26  | 1.26  | 1.26  | 1.27  | 1.28  | 1.28  | 1.29  | 1.30  | 1.31  | 1.32  | 1.34  | 1.36  | 1.37  | 1.38  | 0.3%      |  |
| Pacific                                    | 0.18  | 0.14  | 0.14  | 0.13  | 0.12  | 0.12  | 0.11  | 0.11  | 0.10  | 0.10  | 0.10  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | -3.6%     |  |
| Atlantic                                   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |  |
| Wellhead Prices (1998 dollars per barrel)  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |  |
| Lower 48 Average                           | 11.60 | 20.40 | 19.26 | 19.54 | 19.77 | 19.90 | 20.08 | 20.15 | 20.28 | 20.44 | 20.51 | 20.62 | 21.03 | 20.94 | 20.85 | 20.82 | 20.86 | 20.94 | 21.04 | 21.12 | 21.19 | 21.27 | 2.8%      |  |
| Lower 48 Onshore                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |  |
| Northeast                                  | 12.46 | 21.84 | 19.77 | 19.90 | 20.05 | 20.16 | 20.32 | 20.37 | 20.48 | 20.64 | 20.71 | 20.81 | 21.29 | 21.16 | 20.99 | 20.91 | 20.90 | 20.98 | 21.07 | 21.13 | 21.17 | 21.25 | 2.5%      |  |
| Gulf Coast                                 | 12.23 | 21.43 | 19.64 | 19.77 | 19.90 | 20.01 | 20.16 | 20.22 | 20.32 | 20.48 | 20.54 | 20.63 | 21.12 | 20.98 | 20.83 | 20.75 | 20.75 | 20.84 | 20.93 | 20.99 | 21.04 | 21.11 | 2.5%      |  |
| Midcontinent                               | 12.42 | 21.74 | 19.61 | 19.74 | 19.88 | 20.00 | 20.14 | 20.20 | 20.31 | 20.47 | 20.54 | 20.64 | 21.12 | 20.99 | 20.85 | 20.79 | 20.79 | 20.88 | 20.97 | 21.03 | 21.08 | 21.16 | 2.5%      |  |
| Southwest                                  | 12.29 | 21.51 | 19.35 | 19.48 | 19.61 | 19.73 | 19.86 | 19.93 | 20.04 | 20.19 | 20.27 | 20.36 | 20.84 | 20.72 | 20.62 | 20.59 | 20.62 | 20.71 | 20.80 | 20.87 | 20.94 | 21.03 | 2.5%      |  |
| Rocky Mountain                             | 11.41 | 19.98 | 19.69 | 19.82 | 19.95 | 20.07 | 20.21 | 20.27 | 20.38 | 20.54 | 20.60 | 20.69 | 21.18 | 21.04 | 20.89 | 20.81 | 20.80 | 20.89 | 20.98 | 21.04 | 21.08 | 21.16 | 2.8%      |  |
| West Coast                                 | 9.60  | 16.82 | 16.53 | 17.54 | 18.27 | 18.47 | 18.87 | 18.94 | 19.19 | 19.37 | 19.46 | 19.63 | 19.55 | 19.75 | 19.92 | 20.05 | 20.22 | 20.31 | 20.41 | 20.56 | 20.70 | 20.82 | 3.6%      |  |
| Lower 48 Offshore                          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |  |
| Gulf                                       | 12.03 | 21.06 | 20.43 | 20.56 | 20.70 | 20.82 | 20.96 | 21.03 | 21.14 | 21.30 | 21.36 | 21.46 | 21.97 | 21.82 | 21.66 | 21.58 | 21.58 | 21.67 | 21.76 | 21.83 | 21.88 | 21.96 | 2.8%      |  |
| Pacific                                    | 7.80  | 13.66 | 15.38 | 16.31 | 16.99 | 17.18 | 17.55 | 17.61 | 17.85 | 18.02 | 18.10 | 18.26 | 18.18 | 18.36 | 18.52 | 18.65 | 18.81 | 18.89 | 18.98 | 19.12 | 19.25 | 19.36 | 4.2%      |  |
| Atlantic                                   | 12.03 | 21.06 | 19.77 | 19.90 | 20.05 | 20.16 | 20.32 | 20.37 | 20.48 | 20.64 | 20.71 | 20.81 | 21.29 | 21.16 | 20.99 | 20.91 | 20.90 | 20.98 | 21.07 | 21.13 | 21.17 | 21.25 | 2.6%      |  |

1/ Includes lease condensate.

N/A = Not applicable.

Notes: Supply regions are defined in "Documentation of the Oil and Gas Supply Module", Energy Information Administration (EIA), DOE/EIA-MO63(99) (Washington, DC, January 1999). Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 end-user and wholesale prices: estimated based on Energy Information Administration (EIA) form EI-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report"; and EI-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." End-user prices include Federal and State taxes which are derived from: Federal Highway Administration, Table MF-121T, <http://www.fhwa.dot.gov/ohim/mmfr/mmfrpage.htm>, March 1999. 1998-1999: End-user and wholesale prices are derived from the Short-Term Energy Outlook, 3rd Quarter 1999. 1998 forward: Federal and State taxes and distribution costs are assumed. 2000 forward: End-user and wholesale price projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 81. Lower 48 Natural Gas Production and Wellhead Prices by Supply Region (1 of 1)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Production (trillion cubic feet) 1/                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Lower 48 Total  | 18.44 | 18.47 | 18.03 | 18.06 | 18.44 | 18.70 | 19.24 | 19.80 | 20.43 | 20.95 | 21.26 | 21.97 | 22.42 | 22.86 | 23.31 | 23.87 | 24.52 | 24.80 | 25.14 | 25.44 | 25.66 | 25.86 | 1.5%      |
| Lower 48 Onshore  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Northeast   | 0.78  | 0.81  | 0.83  | 0.86  | 0.86  | 0.86  | 0.85  | 0.84  | 0.82  | 0.82  | 0.82  | 0.85  | 0.89  | 0.96  | 1.05  | 1.15  | 1.27  | 1.32  | 1.37  | 1.40  | 1.41  | 1.45  | 2.8%      |
| Gulf Coast  | 4.81  | 4.88  | 4.53  | 4.34  | 4.28  | 4.35  | 4.60  | 4.96  | 5.39  | 5.76  | 5.99  | 6.29  | 6.40  | 6.40  | 6.34  | 6.30  | 6.33  | 6.33  | 6.39  | 6.46  | 6.47  | 6.41  | 1.3%      |
| Midcontinent  | 2.67  | 2.58  | 2.42  | 2.35  | 2.34  | 2.36  | 2.45  | 2.58  | 2.72  | 2.83  | 2.90  | 3.02  | 3.08  | 3.11  | 3.11  | 3.12  | 3.18  | 3.20  | 3.25  | 3.33  | 3.43  | 3.56  | 1.3%      |
| Southwest   | 1.56  | 1.48  | 1.43  | 1.44  | 1.48  | 1.53  | 1.63  | 1.74  | 1.86  | 1.97  | 2.05  | 2.16  | 2.23  | 2.28  | 2.31  | 2.34  | 2.39  | 2.44  | 2.51  | 2.58  | 2.63  | 2.65  | 2.4%      |
| Rocky Mountain  | 2.84  | 3.09  | 3.17  | 3.30  | 3.43  | 3.43  | 3.49  | 3.57  | 3.66  | 3.71  | 3.76  | 3.85  | 3.92  | 4.03  | 4.15  | 4.30  | 4.47  | 4.63  | 4.82  | 4.98  | 5.10  | 5.21  | 2.8%      |
| West Coast  | 0.25  | 0.18  | 0.20  | 0.20  | 0.20  | 0.20  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.20  | 0.20  | 0.20  | 0.20  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.20  | 0.20  | 1.1%      |
| Lower 48 Offshore   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Gulf  | 5.48  | 5.41  | 5.40  | 5.55  | 5.80  | 5.94  | 5.98  | 5.89  | 5.75  | 5.64  | 5.52  | 5.57  | 5.67  | 5.86  | 6.12  | 6.43  | 6.65  | 6.64  | 6.57  | 6.47  | 6.38  | 6.35  | 0.7%      |
| Pacific   | 0.05  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | -1.6%     |
| Atlantic  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |
| Wellhead Prices<br>(1998 dollars per thousand cubic feet) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Lower 48 Average  | 1.96  | 2.17  | 2.17  | 2.17  | 2.20  | 2.26  | 2.34  | 2.43  | 2.51  | 2.56  | 2.58  | 2.60  | 2.63  | 2.65  | 2.67  | 2.69  | 2.71  | 2.73  | 2.75  | 2.76  | 2.78  | 2.81  | 1.7%      |
| Lower 48 Onshore  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Northeast   | 2.23  | 2.24  | 2.21  | 2.22  | 2.27  | 2.37  | 2.51  | 2.66  | 2.77  | 2.83  | 2.83  | 2.81  | 2.75  | 2.70  | 2.68  | 2.70  | 2.86  | 3.00  | 3.08  | 3.12  | 3.12  | 3.13  | 1.5%      |
| Gulf Coast  | 1.84  | 2.23  | 2.30  | 2.31  | 2.31  | 2.29  | 2.29  | 2.32  | 2.38  | 2.45  | 2.50  | 2.55  | 2.63  | 2.71  | 2.77  | 2.81  | 2.82  | 2.82  | 2.83  | 2.84  | 2.88  | 2.95  | 2.2%      |
| Midcontinent  | 2.00  | 2.28  | 2.29  | 2.29  | 2.29  | 2.32  | 2.35  | 2.41  | 2.47  | 2.53  | 2.55  | 2.58  | 2.63  | 2.68  | 2.73  | 2.76  | 2.76  | 2.75  | 2.74  | 2.74  | 2.75  | 2.76  | 1.5%      |
| Southwest   | 1.88  | 2.19  | 2.20  | 2.20  | 2.20  | 2.20  | 2.24  | 2.30  | 2.38  | 2.46  | 2.50  | 2.55  | 2.62  | 2.69  | 2.75  | 2.78  | 2.78  | 2.76  | 2.76  | 2.77  | 2.81  | 2.88  | 1.9%      |
| Rocky Mountain  | 1.70  | 1.87  | 1.90  | 1.95  | 2.05  | 2.16  | 2.28  | 2.38  | 2.49  | 2.56  | 2.58  | 2.59  | 2.58  | 2.55  | 2.51  | 2.46  | 2.42  | 2.38  | 2.36  | 2.35  | 2.36  | 2.39  | 1.6%      |
| West Coast  | 1.91  | 2.21  | 2.21  | 2.26  | 2.43  | 2.57  | 2.65  | 2.68  | 2.71  | 2.75  | 2.78  | 2.83  | 2.87  | 2.88  | 2.89  | 2.88  | 2.85  | 2.80  | 2.74  | 2.69  | 2.68  | 2.68  | 1.5%      |
| Lower 48 Offshore   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Gulf  | 2.17  | 2.22  | 2.15  | 2.14  | 2.17  | 2.27  | 2.41  | 2.56  | 2.66  | 2.69  | 2.68  | 2.66  | 2.63  | 2.61  | 2.60  | 2.64  | 2.72  | 2.82  | 2.88  | 2.92  | 2.93  | 2.94  | 1.4%      |
| Pacific   | 2.40  | 1.80  | 1.60  | 1.61  | 1.81  | 2.03  | 2.27  | 2.53  | 2.78  | 2.95  | 2.99  | 2.99  | 2.97  | 2.92  | 2.89  | 2.85  | 2.83  | 2.81  | 2.78  | 2.75  | 2.73  | 2.72  | 0.6%      |
| Atlantic  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | N/A       |

1/ Marketed production (wet) minus extraction losses.

N/A = Not applicable.

Notes: Supply regions are defined in "Documentation of the Oil and Gas Supply Module", Energy Information Administration (EIA), DOE/EIA-MO63(99) (Washington, DC, January 1999). Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998: Energy Information Administration (EIA), Office of Integrated Analysis and Forecasting, and Natural Gas Monthly, DOE/EIA-0130(99/6) (Washington, DC, June 1999). Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 82. Oil and Gas, End-of-Year Reserves and Annual Reserve Additions (1 of 1)**

|  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| <b>Lower 48 Reserves</b>                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| <b>Crude Oil (billion barrels)1/</b>         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Lower 48 Total                               | 18.05 | 16.23 | 15.56 | 15.07 | 14.69 | 14.39 | 14.15 | 13.92 | 13.72 | 13.57 | 13.45 | 13.38 | 13.32 | 13.31 | 13.31 | 13.32 | 13.32 | 13.35 | 13.37 | 13.36 | 13.33 | 13.21 | -1.4%     |
| Lower 48 Onshore                             | 13.87 | 12.47 | 11.92 | 11.51 | 11.21 | 10.98 | 10.79 | 10.61 | 10.45 | 10.33 | 10.26 | 10.21 | 10.19 | 10.21 | 10.23 | 10.26 | 10.30 | 10.34 | 10.37 | 10.39 | 10.38 | 10.31 | -1.3%     |
| Conventional                                 | 11.04 | 9.94  | 9.49  | 9.14  | 8.88  | 8.66  | 8.48  | 8.30  | 8.13  | 8.00  | 7.89  | 7.81  | 7.76  | 7.72  | 7.68  | 7.65  | 7.63  | 7.61  | 7.59  | 7.56  | 7.53  | 7.49  | -1.7%     |
| Enhanced Oil Recovery                        | 2.83  | 2.53  | 2.43  | 2.37  | 2.34  | 2.32  | 2.31  | 2.31  | 2.32  | 2.33  | 2.37  | 2.40  | 2.43  | 2.49  | 2.55  | 2.61  | 2.66  | 2.73  | 2.78  | 2.83  | 2.85  | 2.82  | 0.0%      |
| Lower 48 Offshore                            | 4.18  | 3.76  | 3.64  | 3.55  | 3.47  | 3.41  | 3.36  | 3.31  | 3.27  | 3.23  | 3.20  | 3.17  | 3.13  | 3.11  | 3.08  | 3.05  | 3.02  | 3.01  | 2.99  | 2.97  | 2.94  | 2.91  | -1.6%     |
| <b>Dry Natural Gas (trillion cubic feet)</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Lower 48 Total                               | 155.0 | 152.2 | 152.5 | 152.1 | 152.7 | 153.9 | 155.8 | 158.5 | 161.9 | 165.4 | 169.2 | 173.4 | 177.8 | 182.1 | 186.1 | 189.2 | 191.6 | 194.0 | 195.1 | 194.9 | 193.5 | 191.4 | 1.0%      |
| Lower 48 Onshore                             | 121.7 | 118.3 | 118.4 | 118.4 | 119.2 | 120.9 | 123.2 | 125.9 | 129.0 | 132.1 | 135.4 | 139.0 | 142.8 | 146.6 | 150.5 | 153.7 | 156.3 | 159.0 | 160.3 | 160.3 | 159.1 | 157.2 | 1.2%      |
| Associated-Dissolved 2/                      | 13.1  | 12.4  | 12.8  | 12.2  | 11.7  | 11.4  | 11.3  | 11.1  | 11.0  | 10.8  | 10.6  | 10.5  | 10.5  | 10.5  | 10.5  | 10.5  | 10.5  | 10.6  | 10.6  | 10.6  | 10.6  | 10.6  | -1.0%     |
| Non-Associated                               | 108.6 | 105.8 | 105.6 | 106.2 | 107.5 | 109.5 | 111.9 | 114.7 | 118.0 | 121.3 | 124.7 | 128.5 | 132.3 | 136.2 | 140.0 | 143.2 | 145.8 | 148.4 | 149.8 | 149.7 | 148.6 | 146.6 | 1.4%      |
| Conventional                                 | 58.2  | 57.1  | 57.5  | 58.7  | 60.5  | 62.7  | 65.0  | 67.3  | 69.2  | 70.9  | 72.3  | 73.3  | 74.2  | 75.1  | 75.9  | 76.7  | 77.1  | 77.1  | 76.8  | 75.9  | 74.5  | 72.5  | 1.0%      |
| Unconventional                               | 50.4  | 48.7  | 48.1  | 47.5  | 47.0  | 46.8  | 46.9  | 47.5  | 48.8  | 50.4  | 52.5  | 55.2  | 58.1  | 61.0  | 64.0  | 66.5  | 68.7  | 71.3  | 73.0  | 73.8  | 74.1  | 74.2  | 1.8%      |
| Lower 48 Offshore                            | 33.3  | 33.9  | 34.1  | 33.8  | 33.4  | 33.0  | 32.7  | 32.6  | 32.8  | 33.2  | 33.8  | 34.4  | 35.0  | 35.5  | 35.7  | 35.6  | 35.3  | 35.0  | 34.8  | 34.6  | 34.4  | 34.2  | 0.1%      |
| Associated-Dissolved 2/                      | 8.4   | 8.8   | 9.0   | 8.7   | 8.6   | 8.5   | 8.5   | 8.4   | 8.4   | 8.4   | 8.4   | 8.4   | 8.4   | 8.4   | 8.4   | 8.4   | 8.5   | 8.5   | 8.5   | 8.6   | 8.6   | 8.6   | 0.1%      |
| Non-Associated                               | 24.9  | 25.1  | 25.2  | 25.1  | 24.8  | 24.5  | 24.2  | 24.2  | 24.4  | 24.9  | 25.4  | 26.1  | 26.6  | 27.1  | 27.3  | 27.1  | 26.8  | 26.5  | 26.3  | 26.0  | 25.8  | 25.6  | 0.1%      |
| <b>Lower 48 Reserve Additions</b>            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| <b>Crude Oil (billion barrels)1/</b>         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Lower 48 Total                               | 1.18  | 1.03  | 1.06  | 1.18  | 1.26  | 1.32  | 1.36  | 1.37  | 1.40  | 1.43  | 1.48  | 1.52  | 1.55  | 1.61  | 1.63  | 1.66  | 1.68  | 1.71  | 1.72  | 1.71  | 1.70  | 1.62  | 1.4%      |
| Lower 48 Onshore                             | 0.82  | 0.64  | 0.63  | 0.74  | 0.82  | 0.87  | 0.91  | 0.92  | 0.94  | 0.97  | 1.02  | 1.05  | 1.08  | 1.13  | 1.15  | 1.18  | 1.20  | 1.21  | 1.22  | 1.21  | 1.19  | 1.12  | 1.4%      |
| Conventional                                 | 0.70  | 0.50  | 0.50  | 0.57  | 0.63  | 0.67  | 0.70  | 0.70  | 0.71  | 0.74  | 0.76  | 0.80  | 0.82  | 0.84  | 0.86  | 0.87  | 0.89  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 1.1%      |
| Enhanced Oil Recovery                        | 0.12  | 0.14  | 0.13  | 0.17  | 0.19  | 0.20  | 0.21  | 0.22  | 0.23  | 0.23  | 0.25  | 0.25  | 0.26  | 0.29  | 0.29  | 0.30  | 0.30  | 0.31  | 0.32  | 0.31  | 0.29  | 0.22  | 2.9%      |
| Lower 48 Offshore                            | 0.36  | 0.39  | 0.43  | 0.45  | 0.44  | 0.45  | 0.45  | 0.45  | 0.46  | 0.46  | 0.46  | 0.47  | 0.47  | 0.47  | 0.48  | 0.48  | 0.48  | 0.50  | 0.50  | 0.50  | 0.51  | 0.50  | 1.4%      |
| <b>Dry Natural Gas (trillion cubic feet)</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Lower 48 Total                               | 16.8  | 16.5  | 18.4  | 17.7  | 18.9  | 20.0  | 21.1  | 22.5  | 23.8  | 24.4  | 25.1  | 26.2  | 26.8  | 27.1  | 27.4  | 27.0  | 26.9  | 27.2  | 26.2  | 25.2  | 24.3  | 23.7  | 1.6%      |
| Lower 48 Onshore                             | 10.9  | 10.8  | 12.7  | 12.5  | 13.5  | 14.4  | 15.4  | 16.6  | 17.8  | 18.4  | 19.0  | 20.0  | 20.5  | 20.8  | 21.0  | 20.6  | 20.5  | 20.8  | 19.9  | 18.9  | 18.1  | 17.5  | 2.2%      |
| Associated-Dissolved 2/                      | 0.0   | 0.6   | 1.8   | 0.8   | 1.0   | 1.1   | 1.2   | 1.2   | 1.2   | 1.1   | 1.1   | 1.1   | 1.2   | 1.2   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.2   | 1.2   | N/A       |
| Non-Associated                               | 11.1  | 10.3  | 10.9  | 11.6  | 12.5  | 13.3  | 14.3  | 15.4  | 16.6  | 17.3  | 17.9  | 18.9  | 19.3  | 19.5  | 19.7  | 19.3  | 19.2  | 19.5  | 18.6  | 17.6  | 16.8  | 16.3  | 1.7%      |
| Conventional                                 | 6.6   | 6.4   | 6.8   | 7.4   | 8.1   | 8.7   | 9.2   | 9.7   | 10.1  | 10.5  | 10.7  | 10.8  | 10.9  | 10.9  | 10.8  | 10.7  | 10.5  | 10.2  | 9.9   | 9.6   | 9.2   | 8.8   | 1.3%      |
| Unconventional                               | 4.6   | 3.9   | 4.1   | 4.2   | 4.4   | 4.7   | 5.1   | 5.7   | 6.5   | 6.8   | 7.2   | 8.0   | 8.4   | 8.6   | 9.0   | 8.7   | 8.7   | 9.3   | 8.7   | 8.1   | 7.7   | 7.5   | 2.3%      |
| Lower 48 Offshore                            | 5.9   | 5.7   | 5.6   | 5.2   | 5.5   | 5.6   | 5.7   | 5.9   | 6.0   | 6.1   | 6.1   | 6.2   | 6.3   | 6.3   | 6.3   | 6.4   | 6.4   | 6.4   | 6.3   | 6.3   | 6.2   | 6.2   | 0.3%      |
| Associated-Dissolved 2/                      | 1.3   | 1.2   | 1.1   | 0.6   | 0.8   | 0.8   | 0.8   | 0.8   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | -1.5%     |
| Non-Associated                               | 4.6   | 4.5   | 4.5   | 4.6   | 4.6   | 4.7   | 4.9   | 5.0   | 5.1   | 5.2   | 5.3   | 5.3   | 5.4   | 5.4   | 5.5   | 5.5   | 5.5   | 5.5   | 5.4   | 5.4   | 5.3   | 5.3   | 0.7%      |

1/ Includes lease condensate.

2/ Gas which occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved).

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: 1998: Energy Information Administration (EIA), Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 83. Natural Gas Imports and Exports (1 of 1)**

|  | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|
| Volumes (trillion cubic feet)                        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Total Net Imports                                    | 3.13 | 3.65 | 3.85 | 4.00 | 4.10 | 4.14 | 4.19 | 4.24 | 4.32 | 4.38 | 4.45 | 4.52 | 4.57 | 4.64 | 4.70 | 4.77 | 4.85 | 4.94 | 5.01 | 5.06 | 5.10 | 5.14 | 2.3%      |
| Pipeline   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Imports from Canada                                  | 3.20 | 3.59 | 3.77 | 3.90 | 3.97 | 4.00 | 4.03 | 4.07 | 4.15 | 4.22 | 4.30 | 4.37 | 4.44 | 4.52 | 4.59 | 4.67 | 4.77 | 4.86 | 4.93 | 4.98 | 5.02 | 5.06 | 2.1%      |
| Exports to Canada                                    | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.5%      |
| Imports from Mexico                                  | 0.01 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 4.2%      |
| Exports to Mexico                                    | 0.05 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.12 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | 0.21 | 0.22 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.24 | 6.9%      |
| Liquefied Natural Gas                                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Imports  | 0.09 | 0.20 | 0.23 | 0.27 | 0.30 | 0.33 | 0.36 | 0.38 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 7.2%      |
| Exports  | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.1%      |
| Border Prices (1998 dollars per thousand cubic feet) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Average Import Price                                 | 1.96 | 2.05 | 2.14 | 2.28 | 2.40 | 2.50 | 2.59 | 2.63 | 2.65 | 2.65 | 2.64 | 2.64 | 2.64 | 2.64 | 2.64 | 2.65 | 2.67 | 2.69 | 2.73 | 2.78 | 2.84 | 2.92 | 1.8%      |
| Pipeline Import Prices                               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| From Canada  | 1.95 | 2.03 | 2.12 | 2.26 | 2.39 | 2.50 | 2.60 | 2.64 | 2.65 | 2.65 | 2.64 | 2.64 | 2.63 | 2.63 | 2.64 | 2.64 | 2.66 | 2.69 | 2.72 | 2.77 | 2.84 | 2.92 | 1.9%      |
| From Mexico  | 2.02 | 2.24 | 2.27 | 2.28 | 2.28 | 2.28 | 2.30 | 2.34 | 2.41 | 2.48 | 2.52 | 2.57 | 2.64 | 2.71 | 2.76 | 2.81 | 2.82 | 2.81 | 2.82 | 2.83 | 2.87 | 2.93 | 1.7%      |
| LNG Price (incl. regasification)                     | 2.51 | 2.57 | 2.51 | 2.49 | 2.48 | 2.50 | 2.53 | 2.57 | 2.62 | 2.65 | 2.66 | 2.67 | 2.69 | 2.71 | 2.72 | 2.74 | 2.77 | 2.79 | 2.81 | 2.83 | 2.85 | 2.90 | 0.6%      |

N/A = Not applicable.

LNG = Liquefied natural gas.

Incl. = Includes.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 import and export volumes; pipeline import price from Canada; and LNG price: Energy Information Administration (EIA), Natural Gas Monthly, DOE/EIA-0130(99/6) (Washington, D.C., June 1999). Other 1998: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 84. Natural Gas Consumption by End-Use Sector and Census Division (1 of 2)  
(Trillion Cubic Feet per Year)**

|                      | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |      |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|------|
| <b>Residential</b>   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |
| New England          | 0.17 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22      | 1.2% |
| Middle Atlantic      | 0.78 | 0.84 | 0.84 | 0.84 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87      | 0.5% |
| East North Central   | 1.38 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.50 | 1.50 | 1.50 | 1.51 | 1.51 | 1.52 | 1.52 | 1.53 | 1.53 | 1.54 | 1.54      | 0.5% |
| West North Central   | 0.43 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.49 | 0.49 | 0.49 | 0.49 | 0.50 | 0.50 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 0.51 | 0.52 | 0.52      | 0.8% |
| South Atlantic       | 0.36 | 0.40 | 0.41 | 0.42 | 0.43 | 0.44 | 0.45 | 0.47 | 0.48 | 0.49 | 0.50 | 0.52 | 0.53 | 0.54 | 0.54 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.61 | 0.61      | 2.4% |
| East South Central   | 0.19 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.23 | 0.23 | 0.23 | 0.24 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 0.27 | 0.27      | 1.6% |
| West South Central   | 0.36 | 0.43 | 0.43 | 0.43 | 0.43 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.45 | 0.45 | 0.46 | 0.46 | 0.46 | 0.46 | 0.47 | 0.47 | 0.48 | 0.48 | 0.49      | 1.3% |
| Mountain             | 0.26 | 0.28 | 0.29 | 0.30 | 0.30 | 0.31 | 0.31 | 0.32 | 0.32 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.36 | 0.37 | 0.37      | 1.6% |
| Pacific              | 0.55 | 0.58 | 0.59 | 0.60 | 0.61 | 0.63 | 0.64 | 0.66 | 0.67 | 0.69 | 0.71 | 0.73 | 0.73 | 0.74 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.79 | 0.80 | 0.81 | 0.81      | 1.8% |
| Total                | 4.48 | 4.90 | 4.92 | 4.96 | 5.00 | 5.05 | 5.07 | 5.11 | 5.16 | 5.22 | 5.25 | 5.30 | 5.34 | 5.39 | 5.41 | 5.45 | 5.49 | 5.54 | 5.56 | 5.60 | 5.64 | 5.69 | 5.69      | 1.1% |
|                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |
| <b>Commercial</b>    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |
| New England          | 0.15 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18      | 0.7% |
| Middle Atlantic      | 0.54 | 0.57 | 0.57 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.59 | 0.59 | 0.59 | 0.59 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60      | 0.5% |
| East North Central   | 0.76 | 0.79 | 0.80 | 0.80 | 0.80 | 0.81 | 0.81 | 0.82 | 0.82 | 0.83 | 0.83 | 0.84 | 0.84 | 0.85 | 0.85 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86      | 0.6% |
| West North Central   | 0.33 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.37 | 0.37 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38      | 0.7% |
| South Atlantic       | 0.31 | 0.33 | 0.34 | 0.34 | 0.35 | 0.35 | 0.36 | 0.36 | 0.37 | 0.37 | 0.38 | 0.39 | 0.40 | 0.40 | 0.41 | 0.41 | 0.42 | 0.42 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43      | 1.5% |
| East South Central   | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18      | 1.0% |
| West South Central   | 0.27 | 0.30 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36      | 1.3% |
| Mountain             | 0.20 | 0.22 | 0.23 | 0.23 | 0.23 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.28      | 1.5% |
| Pacific              | 0.32 | 0.33 | 0.33 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.36 | 0.36 | 0.36 | 0.37 | 0.37 | 0.37 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38      | 0.7% |
| Total                | 3.03 | 3.20 | 3.24 | 3.27 | 3.29 | 3.31 | 3.34 | 3.36 | 3.39 | 3.41 | 3.45 | 3.48 | 3.51 | 3.54 | 3.57 | 3.59 | 3.61 | 3.63 | 3.64 | 3.65 | 3.65 | 3.65 | 3.65      | 0.9% |
|                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |
| <b>Industrial 1/</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |
| New England          | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16      | 0.9% |
| Middle Atlantic      | 0.61 | 0.62 | 0.62 | 0.63 | 0.64 | 0.66 | 0.67 | 0.68 | 0.68 | 0.69 | 0.69 | 0.69 | 0.70 | 0.70 | 0.71 | 0.71 | 0.72 | 0.72 | 0.72 | 0.73 | 0.73 | 0.74 | 0.74      | 0.9% |
| East North Central   | 1.36 | 1.40 | 1.40 | 1.43 | 1.47 | 1.51 | 1.54 | 1.57 | 1.58 | 1.60 | 1.61 | 1.62 | 1.63 | 1.64 | 1.66 | 1.68 | 1.70 | 1.71 | 1.72 | 1.74 | 1.75 | 1.77 | 1.77      | 1.2% |
| West North Central   | 0.41 | 0.43 | 0.43 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.48 | 0.49 | 0.49 | 0.50 | 0.50 | 0.50 | 0.51 | 0.51 | 0.52 | 0.52 | 0.53 | 0.53 | 0.54 | 0.54 | 0.54      | 1.2% |
| South Atlantic       | 0.67 | 0.67 | 0.67 | 0.68 | 0.70 | 0.71 | 0.73 | 0.74 | 0.75 | 0.75 | 0.76 | 0.76 | 0.76 | 0.77 | 0.78 | 0.79 | 0.80 | 0.80 | 0.81 | 0.82 | 0.82 | 0.83 | 0.83      | 1.0% |
| East South Central   | 0.48 | 0.46 | 0.47 | 0.47 | 0.49 | 0.50 | 0.51 | 0.51 | 0.52 | 0.52 | 0.52 | 0.53 | 0.53 | 0.53 | 0.54 | 0.54 | 0.55 | 0.55 | 0.56 | 0.56 | 0.57 | 0.57 | 0.57      | 0.8% |
| West South Central   | 3.39 | 3.22 | 3.23 | 3.28 | 3.37 | 3.44 | 3.50 | 3.56 | 3.59 | 3.62 | 3.63 | 3.66 | 3.67 | 3.70 | 3.73 | 3.77 | 3.80 | 3.82 | 3.85 | 3.88 | 3.91 | 3.94 | 3.94      | 0.7% |
| Mountain             | 0.29 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.31 | 0.31 | 0.32 | 0.32 | 0.32 | 0.32 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35      | 1.0% |
| Pacific              | 0.90 | 0.89 | 0.88 | 0.89 | 0.91 | 0.93 | 0.94 | 0.96 | 0.97 | 0.98 | 0.98 | 0.99 | 1.00 | 1.01 | 1.02 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 | 1.09 | 1.10 | 1.10      | 0.9% |
| Total                | 8.23 | 8.10 | 8.12 | 8.24 | 8.46 | 8.63 | 8.81 | 8.96 | 9.03 | 9.10 | 9.15 | 9.22 | 9.26 | 9.34 | 9.43 | 9.54 | 9.64 | 9.69 | 9.76 | 9.83 | 9.91 | 9.99 | 9.99      | 0.9% |

**Table 84. Natural Gas Consumption by End-Use Sector and Census Division (2 of 2)  
(Trillion Cubic Feet per Year)**

|                               | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |      |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------|
| <b>Electric Generators 2/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| New England                   | 0.19  | 0.15  | 0.15  | 0.17  | 0.16  | 0.18  | 0.22  | 0.27  | 0.31  | 0.34  | 0.36  | 0.40  | 0.42  | 0.46  | 0.49  | 0.50  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51  | 0.51      | 4.5% |
| Middle Atlantic               | 0.29  | 0.17  | 0.18  | 0.21  | 0.23  | 0.25  | 0.31  | 0.36  | 0.45  | 0.50  | 0.54  | 0.67  | 0.74  | 0.78  | 0.84  | 0.93  | 1.05  | 1.11  | 1.16  | 1.18  | 1.18  | 1.18  | 1.19      | 6.6% |
| East North Central            | 0.14  | 0.28  | 0.22  | 0.23  | 0.23  | 0.17  | 0.25  | 0.26  | 0.35  | 0.43  | 0.49  | 0.56  | 0.62  | 0.66  | 0.71  | 0.77  | 0.90  | 0.94  | 1.06  | 1.17  | 1.21  | 1.25  | 10.4%     |      |
| West North Central            | 0.08  | 0.06  | 0.04  | 0.03  | 0.02  | 0.04  | 0.04  | 0.06  | 0.07  | 0.08  | 0.09  | 0.11  | 0.13  | 0.14  | 0.16  | 0.18  | 0.24  | 0.25  | 0.26  | 0.26  | 0.26  | 0.27  | 5.9%      |      |
| South Atlantic                | 0.40  | 0.46  | 0.39  | 0.38  | 0.40  | 0.42  | 0.48  | 0.53  | 0.57  | 0.60  | 0.60  | 0.65  | 0.68  | 0.73  | 0.78  | 0.83  | 0.86  | 0.89  | 0.93  | 0.95  | 0.97  | 0.98  | 4.2%      |      |
| East South Central            | 0.11  | 0.06  | 0.06  | 0.06  | 0.07  | 0.13  | 0.19  | 0.26  | 0.32  | 0.40  | 0.45  | 0.53  | 0.60  | 0.64  | 0.68  | 0.75  | 0.81  | 0.85  | 0.88  | 0.92  | 0.94  | 0.94  | 10.0%     |      |
| West South Central            | 1.85  | 1.84  | 1.75  | 1.74  | 1.84  | 1.86  | 1.91  | 1.97  | 2.06  | 2.14  | 2.14  | 2.20  | 2.24  | 2.28  | 2.32  | 2.38  | 2.48  | 2.50  | 2.52  | 2.54  | 2.58  | 2.59  | 1.5%      |      |
| Mountain                      | 0.17  | 0.31  | 0.31  | 0.30  | 0.28  | 0.25  | 0.25  | 0.24  | 0.26  | 0.25  | 0.24  | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.22  | 0.22  | 0.21  | 0.21  | 0.21  | 0.21  | 1.0%      |      |
| Pacific                       | 0.43  | 0.80  | 0.79  | 0.80  | 0.86  | 0.86  | 0.87  | 0.92  | 0.96  | 1.01  | 1.05  | 1.11  | 1.15  | 1.20  | 1.24  | 1.27  | 1.30  | 1.31  | 1.33  | 1.31  | 1.31  | 1.32  | 5.2%      |      |
| Total                         | 3.67  | 4.12  | 3.88  | 3.91  | 4.10  | 4.17  | 4.53  | 4.86  | 5.36  | 5.73  | 5.95  | 6.45  | 6.81  | 7.11  | 7.44  | 7.85  | 8.37  | 8.58  | 8.85  | 9.06  | 9.17  | 9.26  | 4.3%      |      |
| <b>Transportation 3/</b>      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| New England                   | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 12.9%     |      |
| Middle Atlantic               | 0.00  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 12.2%     |      |
| East North Central            | 0.00  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 12.5%     |      |
| West North Central            | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 12.9%     |      |
| South Atlantic                | 0.00  | 0.01  | 0.01  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 0.05  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  | 13.4%     |      |
| East South Central            | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 13.1%     |      |
| West South Central            | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 13.3%     |      |
| Mountain                      | 0.00  | 0.00  | 0.00  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 14.5%     |      |
| Pacific                       | 0.00  | 0.01  | 0.01  | 0.01  | 0.02  | 0.02  | 0.02  | 0.03  | 0.03  | 0.03  | 0.03  | 0.03  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.04  | 0.05  | 0.05  | 0.05  | 12.9%     |      |
| Total                         | 0.02  | 0.05  | 0.07  | 0.10  | 0.12  | 0.14  | 0.15  | 0.17  | 0.18  | 0.20  | 0.21  | 0.22  | 0.24  | 0.25  | 0.26  | 0.27  | 0.28  | 0.29  | 0.30  | 0.31  | 0.31  | 0.32  | 13.0%     |      |
| <b>All Sectors 4/</b>         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |      |
| New England                   | 0.65  | 0.63  | 0.64  | 0.66  | 0.66  | 0.69  | 0.73  | 0.79  | 0.83  | 0.87  | 0.89  | 0.94  | 0.96  | 1.00  | 1.03  | 1.05  | 1.07  | 1.08  | 1.08  | 1.08  | 1.09  | 1.09  | 2.4%      |      |
| Middle Atlantic               | 2.21  | 2.21  | 2.22  | 2.27  | 2.31  | 2.36  | 2.43  | 2.50  | 2.59  | 2.65  | 2.70  | 2.84  | 2.91  | 2.97  | 3.03  | 3.14  | 3.26  | 3.33  | 3.38  | 3.41  | 3.41  | 3.43  | 2.0%      |      |
| East North Central            | 3.64  | 3.97  | 3.92  | 3.96  | 4.02  | 4.00  | 4.11  | 4.16  | 4.27  | 4.38  | 4.45  | 4.55  | 4.63  | 4.70  | 4.77  | 4.86  | 5.01  | 5.08  | 5.21  | 5.34  | 5.40  | 5.46  | 1.9%      |      |
| West North Central            | 1.25  | 1.31  | 1.29  | 1.30  | 1.31  | 1.34  | 1.36  | 1.39  | 1.40  | 1.43  | 1.45  | 1.47  | 1.51  | 1.53  | 1.56  | 1.59  | 1.66  | 1.68  | 1.69  | 1.71  | 1.71  | 1.72  | 1.5%      |      |
| South Atlantic                | 1.75  | 1.86  | 1.81  | 1.84  | 1.90  | 1.96  | 2.05  | 2.13  | 2.20  | 2.25  | 2.28  | 2.36  | 2.41  | 2.48  | 2.56  | 2.64  | 2.69  | 2.74  | 2.80  | 2.84  | 2.88  | 2.92  | 2.4%      |      |
| East South Central            | 0.92  | 0.89  | 0.90  | 0.91  | 0.94  | 1.02  | 1.09  | 1.17  | 1.25  | 1.34  | 1.40  | 1.49  | 1.56  | 1.61  | 1.66  | 1.74  | 1.81  | 1.85  | 1.89  | 1.94  | 1.97  | 1.98  | 3.5%      |      |
| West South Central            | 5.87  | 5.79  | 5.73  | 5.76  | 5.96  | 6.06  | 6.19  | 6.31  | 6.43  | 6.54  | 6.56  | 6.66  | 6.72  | 6.79  | 6.88  | 6.99  | 7.13  | 7.17  | 7.22  | 7.27  | 7.35  | 7.40  | 1.1%      |      |
| Mountain                      | 0.91  | 1.10  | 1.11  | 1.12  | 1.12  | 1.10  | 1.12  | 1.12  | 1.15  | 1.15  | 1.15  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.20  | 1.21  | 1.21  | 1.22  | 1.22  | 1.24  | 1.4%      |      |
| Pacific                       | 2.21  | 2.60  | 2.60  | 2.64  | 2.74  | 2.77  | 2.81  | 2.90  | 2.97  | 3.05  | 3.12  | 3.21  | 3.27  | 3.35  | 3.41  | 3.47  | 3.53  | 3.56  | 3.60  | 3.61  | 3.63  | 3.65  | 2.3%      |      |
| Total                         | 19.42 | 20.36 | 20.23 | 20.47 | 20.95 | 21.29 | 21.89 | 22.46 | 23.11 | 23.65 | 24.00 | 24.66 | 25.14 | 25.60 | 26.09 | 26.67 | 27.35 | 27.70 | 28.08 | 28.41 | 28.66 | 28.87 | 1.8%      |      |

1/ Excludes lease and plant fuel, and includes consumption by cogenerators.

2/ Includes all electric power generators except cogenerators, which produce electricity and another form of thermal energy.

3/ Compressed natural gas used as a vehicle fuel.

4/ Excludes lease and plant fuel and natural gas used for pipeline compressor station fuel.

Btu = British thermal unit.

N/A = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 electric utility fuel consumption: EIA, Electric Power Annual 1998, Volume 1, DOE/EIA-0348(98)/1 (Washington, DC, April 1999). 1998 nonutility consumption estimates: Form EIA-867, "Annual Nonutility Power Producer Report, 1997."

Other 1998 values: EIA, Short-Term Energy Outlook, September 1999. Online <http://www.eia.doe.gov/emeu/pub/forecasting/steo/oldsteo/sep99.pdf> (October 12, 1999). Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 85. Natural Gas Delivered Prices by End-Use Sector and Census Division (1 of 2)  
(1998 Dollars per Thousand Cubic Feet)**

|                      | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-<br>2020 |  |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|--|
| <b>Residential</b>   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |  |
| New England          | 9.47 | 9.46 | 9.37 | 9.31 | 9.24 | 9.23 | 9.23 | 9.21 | 9.18 | 9.11 | 9.03 | 8.96 | 8.88 | 8.81 | 8.75 | 8.68 | 8.62 | 8.56 | 8.52 | 8.47 | 8.45 | 8.44 | -0.5%         |  |
| Middle Atlantic      | 8.47 | 8.45 | 8.36 | 8.32 | 8.29 | 8.29 | 8.30 | 8.30 | 8.30 | 8.26 | 8.21 | 8.16 | 8.11 | 8.06 | 8.02 | 7.99 | 7.96 | 7.94 | 7.91 | 7.89 | 7.87 | 7.86 | -0.3%         |  |
| East North Central   | 5.76 | 5.95 | 5.92 | 5.90 | 5.89 | 5.90 | 5.94 | 5.96 | 5.98 | 5.97 | 5.95 | 5.92 | 5.91 | 5.90 | 5.89 | 5.87 | 5.86 | 5.84 | 5.84 | 5.83 | 5.83 | 5.85 | 0.1%          |  |
| West North Central   | 5.91 | 6.05 | 6.05 | 6.03 | 6.04 | 6.06 | 6.08 | 6.10 | 6.10 | 6.07 | 6.04 | 6.01 | 6.00 | 5.98 | 5.96 | 5.93 | 5.90 | 5.88 | 5.87 | 5.86 | 5.87 | 5.90 | 0.0%          |  |
| South Atlantic       | 8.09 | 8.09 | 7.95 | 7.83 | 7.73 | 7.66 | 7.63 | 7.60 | 7.58 | 7.53 | 7.46 | 7.39 | 7.34 | 7.28 | 7.24 | 7.19 | 7.16 | 7.11 | 7.08 | 7.04 | 7.00 | 6.98 | -0.7%         |  |
| East South Central   | 6.69 | 6.79 | 6.72 | 6.65 | 6.60 | 6.58 | 6.60 | 6.62 | 6.65 | 6.64 | 6.61 | 6.58 | 6.57 | 6.56 | 6.55 | 6.55 | 6.54 | 6.53 | 6.53 | 6.52 | 6.51 | 6.51 | -0.1%         |  |
| West South Central   | 6.39 | 6.44 | 6.39 | 6.33 | 6.28 | 6.27 | 6.29 | 6.32 | 6.35 | 6.35 | 6.33 | 6.31 | 6.31 | 6.30 | 6.29 | 6.29 | 6.28 | 6.27 | 6.27 | 6.26 | 6.25 | 6.26 | -0.1%         |  |
| Mountain             | 5.80 | 5.70 | 5.65 | 5.63 | 5.77 | 5.88 | 5.94 | 6.02 | 6.10 | 6.14 | 6.15 | 6.15 | 6.15 | 6.12 | 6.10 | 6.06 | 6.06 | 6.06 | 6.07 | 6.08 | 6.08 | 6.09 | 0.2%          |  |
| Pacific              | 6.77 | 6.92 | 6.93 | 6.94 | 6.96 | 6.97 | 6.98 | 6.99 | 6.98 | 6.96 | 6.93 | 6.89 | 6.85 | 6.80 | 6.74 | 6.67 | 6.60 | 6.53 | 6.48 | 6.44 | 6.41 | 6.42 | -0.2%         |  |
| Average              | 6.79 | 6.88 | 6.83 | 6.80 | 6.79 | 6.79 | 6.81 | 6.83 | 6.84 | 6.83 | 6.79 | 6.76 | 6.73 | 6.70 | 6.68 | 6.64 | 6.62 | 6.59 | 6.57 | 6.55 | 6.54 | 6.55 | -0.2%         |  |
| <b>Commercial</b>    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |  |
| New England          | 7.08 | 7.29 | 7.22 | 7.19 | 7.17 | 7.19 | 7.22 | 7.25 | 7.25 | 7.22 | 7.17 | 7.14 | 7.09 | 7.05 | 7.01 | 6.97 | 6.95 | 6.92 | 6.90 | 6.89 | 6.89 | 6.91 | -0.1%         |  |
| Middle Atlantic      | 5.25 | 5.45 | 5.40 | 5.40 | 5.41 | 5.45 | 5.50 | 5.54 | 5.57 | 5.58 | 5.56 | 5.54 | 5.52 | 5.51 | 5.49 | 5.49 | 5.50 | 5.50 | 5.51 | 5.51 | 5.52 | 5.55 | 0.3%          |  |
| East North Central   | 5.26 | 5.53 | 5.49 | 5.47 | 5.46 | 5.48 | 5.51 | 5.53 | 5.56 | 5.56 | 5.54 | 5.52 | 5.51 | 5.50 | 5.49 | 5.48 | 5.48 | 5.47 | 5.47 | 5.46 | 5.48 | 5.50 | 0.2%          |  |
| West North Central   | 4.84 | 5.10 | 5.11 | 5.10 | 5.12 | 5.15 | 5.18 | 5.21 | 5.22 | 5.22 | 5.20 | 5.18 | 5.17 | 5.17 | 5.15 | 5.14 | 5.12 | 5.11 | 5.11 | 5.12 | 5.14 | 5.17 | 0.3%          |  |
| South Atlantic       | 6.46 | 6.64 | 6.53 | 6.46 | 6.40 | 6.38 | 6.39 | 6.41 | 6.44 | 6.44 | 6.40 | 6.37 | 6.35 | 6.34 | 6.32 | 6.31 | 6.30 | 6.29 | 6.28 | 6.26 | 6.25 | 6.26 | -0.1%         |  |
| East South Central   | 5.74 | 5.97 | 5.91 | 5.86 | 5.82 | 5.82 | 5.84 | 5.89 | 5.93 | 5.95 | 5.93 | 5.92 | 5.93 | 5.93 | 5.94 | 5.95 | 5.96 | 5.96 | 5.97 | 5.97 | 5.97 | 5.99 | 0.2%          |  |
| West South Central   | 4.76 | 4.98 | 4.94 | 4.89 | 4.86 | 4.86 | 4.89 | 4.95 | 4.99 | 5.02 | 5.02 | 5.01 | 5.03 | 5.04 | 5.05 | 5.07 | 5.08 | 5.09 | 5.11 | 5.11 | 5.13 | 5.15 | 0.4%          |  |
| Mountain             | 4.70 | 4.77 | 4.74 | 4.75 | 4.90 | 5.02 | 5.09 | 5.19 | 5.28 | 5.35 | 5.38 | 5.39 | 5.40 | 5.39 | 5.38 | 5.35 | 5.35 | 5.36 | 5.38 | 5.39 | 5.40 | 5.42 | 0.6%          |  |
| Pacific              | 5.72 | 5.96 | 5.99 | 6.03 | 6.08 | 6.11 | 6.14 | 6.17 | 6.20 | 6.20 | 6.20 | 6.18 | 6.15 | 6.12 | 6.08 | 6.02 | 5.97 | 5.92 | 5.89 | 5.85 | 5.84 | 5.85 | 0.1%          |  |
| Average              | 5.42 | 5.63 | 5.60 | 5.58 | 5.58 | 5.61 | 5.64 | 5.68 | 5.71 | 5.72 | 5.71 | 5.69 | 5.68 | 5.67 | 5.66 | 5.65 | 5.64 | 5.63 | 5.63 | 5.63 | 5.63 | 5.66 | 0.2%          |  |
| <b>Industrial 1/</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               |  |
| New England          | 3.60 | 3.82 | 3.80 | 3.84 | 3.88 | 3.96 | 4.04 | 4.11 | 4.15 | 4.16 | 4.15 | 4.14 | 4.12 | 4.11 | 4.10 | 4.09 | 4.10 | 4.10 | 4.10 | 4.12 | 4.14 | 4.18 | 0.7%          |  |
| Middle Atlantic      | 3.71 | 3.88 | 3.86 | 3.90 | 3.96 | 4.03 | 4.12 | 4.18 | 4.23 | 4.25 | 4.25 | 4.25 | 4.25 | 4.25 | 4.25 | 4.26 | 4.28 | 4.30 | 4.32 | 4.34 | 4.36 | 4.40 | 0.8%          |  |
| East North Central   | 3.10 | 3.35 | 3.36 | 3.38 | 3.42 | 3.47 | 3.55 | 3.60 | 3.65 | 3.67 | 3.67 | 3.68 | 3.69 | 3.70 | 3.71 | 3.72 | 3.74 | 3.75 | 3.76 | 3.78 | 3.81 | 3.85 | 1.0%          |  |
| West North Central   | 2.96 | 3.18 | 3.22 | 3.26 | 3.32 | 3.39 | 3.46 | 3.50 | 3.54 | 3.55 | 3.55 | 3.55 | 3.55 | 3.56 | 3.56 | 3.56 | 3.56 | 3.57 | 3.57 | 3.59 | 3.63 | 3.67 | 1.0%          |  |
| South Atlantic       | 2.80 | 3.02 | 2.97 | 2.98 | 2.99 | 3.03 | 3.10 | 3.18 | 3.25 | 3.29 | 3.30 | 3.32 | 3.33 | 3.35 | 3.37 | 3.40 | 3.43 | 3.45 | 3.48 | 3.49 | 3.51 | 3.54 | 1.1%          |  |
| East South Central   | 2.52 | 2.75 | 2.73 | 2.73 | 2.74 | 2.79 | 2.86 | 2.94 | 3.02 | 3.07 | 3.09 | 3.11 | 3.13 | 3.17 | 3.20 | 3.23 | 3.27 | 3.30 | 3.33 | 3.35 | 3.37 | 3.41 | 1.4%          |  |
| West South Central   | 2.41 | 2.64 | 2.63 | 2.63 | 2.64 | 2.69 | 2.76 | 2.84 | 2.91 | 2.97 | 2.99 | 3.01 | 3.04 | 3.08 | 3.11 | 3.15 | 3.18 | 3.21 | 3.25 | 3.27 | 3.30 | 3.34 | 1.5%          |  |
| Mountain             | 2.43 | 2.47 | 2.48 | 2.54 | 2.76 | 2.93 | 3.04 | 3.16 | 3.29 | 3.38 | 3.43 | 3.47 | 3.51 | 3.51 | 3.52 | 3.52 | 3.55 | 3.59 | 3.64 | 3.68 | 3.71 | 3.74 | 2.0%          |  |
| Pacific              | 2.66 | 2.91 | 2.99 | 3.09 | 3.21 | 3.30 | 3.39 | 3.46 | 3.53 | 3.57 | 3.59 | 3.61 | 3.61 | 3.61 | 3.60 | 3.58 | 3.56 | 3.55 | 3.54 | 3.53 | 3.55 | 3.59 | 1.4%          |  |
| Average              | 2.73 | 2.97 | 2.97 | 2.99 | 3.03 | 3.09 | 3.17 | 3.24 | 3.31 | 3.35 | 3.36 | 3.38 | 3.40 | 3.42 | 3.44 | 3.45 | 3.48 | 3.50 | 3.52 | 3.53 | 3.56 | 3.60 | 1.3%          |  |

**Table 85. Natural Gas Delivered Prices by End-Use Sector and Census Division (2 of 2)  
(1998 Dollars per Thousand Cubic Feet)**

|                               | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |  |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--|
| <b>Electric Generators 2/</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |  |
| New England                   | 2.85 | 3.20 | 3.21 | 3.28 | 3.31 | 3.39 | 3.47 | 3.53 | 3.56 | 3.57 | 3.56 | 3.56 | 3.54 | 3.55 | 3.54 | 3.53 | 3.54 | 3.54 | 3.55 | 3.57 | 3.59 | 3.64 | 1.1%      |  |
| Middle Atlantic               | 2.70 | 2.93 | 2.88 | 2.93 | 3.01 | 3.11 | 3.12 | 3.22 | 3.27 | 3.30 | 3.33 | 3.31 | 3.33 | 3.34 | 3.35 | 3.38 | 3.42 | 3.46 | 3.49 | 3.51 | 3.54 | 3.58 | 1.3%      |  |
| East North Central            | 1.79 | 2.19 | 2.20 | 2.21 | 2.26 | 2.34 | 2.40 | 2.47 | 2.51 | 2.52 | 2.65 | 2.72 | 2.74 | 2.78 | 2.81 | 2.82 | 2.83 | 2.86 | 2.87 | 2.90 | 2.95 | 3.00 | 2.4%      |  |
| West North Central            | 2.21 | 2.52 | 2.51 | 2.54 | 2.61 | 2.79 | 2.91 | 3.01 | 3.05 | 3.12 | 3.16 | 3.19 | 3.22 | 3.25 | 3.24 | 3.24 | 3.22 | 3.24 | 3.24 | 3.26 | 3.30 | 3.35 | 1.9%      |  |
| South Atlantic                | 2.49 | 2.70 | 2.58 | 2.61 | 2.57 | 2.58 | 2.65 | 2.74 | 2.79 | 2.87 | 2.89 | 2.92 | 2.98 | 3.04 | 3.10 | 3.17 | 3.22 | 3.25 | 3.30 | 3.33 | 3.34 | 3.38 | 1.4%      |  |
| East South Central            | 2.64 | 2.92 | 2.80 | 2.80 | 2.78 | 3.00 | 3.15 | 3.27 | 3.39 | 3.48 | 3.51 | 3.56 | 3.58 | 3.61 | 3.64 | 3.68 | 3.72 | 3.75 | 3.77 | 3.80 | 3.82 | 3.86 | 1.7%      |  |
| West South Central            | 2.28 | 2.53 | 2.50 | 2.50 | 2.48 | 2.52 | 2.59 | 2.67 | 2.75 | 2.81 | 2.85 | 2.87 | 2.91 | 2.94 | 2.98 | 3.02 | 3.06 | 3.10 | 3.13 | 3.16 | 3.19 | 3.24 | 1.6%      |  |
| Mountain                      | 2.26 | 2.55 | 2.58 | 2.68 | 2.90 | 3.12 | 3.31 | 3.43 | 3.54 | 3.67 | 3.73 | 3.77 | 3.81 | 3.82 | 3.81 | 3.79 | 3.78 | 3.77 | 3.73 | 3.69 | 3.66 | 3.66 | 2.2%      |  |
| Pacific                       | 2.63 | 2.92 | 2.96 | 3.02 | 3.10 | 3.16 | 3.21 | 3.28 | 3.34 | 3.39 | 3.42 | 3.45 | 3.47 | 3.48 | 3.48 | 3.47 | 3.46 | 3.46 | 3.46 | 3.46 | 3.48 | 3.53 | 1.4%      |  |
| Average                       | 2.40 | 2.65 | 2.64 | 2.67 | 2.70 | 2.78 | 2.85 | 2.95 | 3.02 | 3.07 | 3.11 | 3.14 | 3.17 | 3.20 | 3.23 | 3.25 | 3.28 | 3.30 | 3.32 | 3.34 | 3.36 | 3.41 | 1.6%      |  |
|                               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |  |
| <b>Transportation 3/</b>      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |  |
| New England                   | 8.08 | 8.48 | 8.38 | 8.38 | 8.39 | 8.49 | 8.61 | 8.74 | 8.86 | 8.93 | 8.96 | 9.00 | 9.00 | 9.01 | 9.01 | 8.99 | 8.98 | 8.96 | 8.94 | 8.92 | 8.91 | 8.91 | 0.4%      |  |
| Middle Atlantic               | 7.01 | 7.46 | 7.32 | 7.30 | 7.35 | 7.46 | 7.61 | 7.78 | 7.96 | 8.09 | 8.18 | 8.28 | 8.35 | 8.41 | 8.45 | 8.47 | 8.52 | 8.52 | 8.53 | 8.53 | 8.53 | 8.55 | 0.9%      |  |
| East North Central            | 7.19 | 7.61 | 7.54 | 7.52 | 7.55 | 7.62 | 7.74 | 7.86 | 7.98 | 8.06 | 8.11 | 8.16 | 8.20 | 8.24 | 8.26 | 8.27 | 8.28 | 8.27 | 8.27 | 8.26 | 8.26 | 8.27 | 0.6%      |  |
| West North Central            | 5.18 | 5.72 | 5.68 | 5.67 | 5.75 | 5.88 | 6.05 | 6.24 | 6.43 | 6.57 | 6.69 | 6.79 | 6.88 | 6.95 | 7.00 | 7.03 | 7.05 | 7.06 | 7.06 | 7.07 | 7.09 | 7.13 | 1.5%      |  |
| South Atlantic                | 5.75 | 6.24 | 6.11 | 6.08 | 6.10 | 6.19 | 6.34 | 6.53 | 6.73 | 6.89 | 6.99 | 7.09 | 7.18 | 7.26 | 7.32 | 7.37 | 7.42 | 7.44 | 7.46 | 7.46 | 7.46 | 7.48 | 1.2%      |  |
| East South Central            | 6.29 | 6.67 | 6.60 | 6.57 | 6.59 | 6.66 | 6.78 | 6.93 | 7.08 | 7.20 | 7.27 | 7.34 | 7.40 | 7.47 | 7.52 | 7.57 | 7.61 | 7.63 | 7.66 | 7.67 | 7.68 | 7.71 | 0.9%      |  |
| West South Central            | 4.41 | 5.00 | 4.90 | 4.85 | 4.89 | 5.01 | 5.20 | 5.45 | 5.72 | 5.93 | 6.09 | 6.23 | 6.36 | 6.48 | 6.57 | 6.65 | 6.71 | 6.75 | 6.78 | 6.80 | 6.82 | 6.86 | 2.0%      |  |
| Mountain                      | 4.95 | 5.45 | 5.43 | 5.48 | 5.67 | 5.86 | 6.05 | 6.27 | 6.52 | 6.72 | 6.87 | 7.00 | 7.10 | 7.16 | 7.21 | 7.23 | 7.26 | 7.28 | 7.30 | 7.31 | 7.32 | 7.33 | 1.8%      |  |
| Pacific                       | 5.25 | 5.84 | 5.86 | 5.93 | 6.08 | 6.24 | 6.44 | 6.65 | 6.87 | 7.05 | 7.18 | 7.29 | 7.38 | 7.44 | 7.47 | 7.48 | 7.47 | 7.46 | 7.45 | 7.44 | 7.45 | 7.48 | 1.6%      |  |
| Average                       | 6.00 | 6.49 | 6.41 | 6.41 | 6.47 | 6.58 | 6.73 | 6.91 | 7.10 | 7.24 | 7.34 | 7.43 | 7.51 | 7.57 | 7.61 | 7.64 | 7.66 | 7.67 | 7.68 | 7.68 | 7.68 | 7.70 | 1.1%      |  |
|                               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |  |
| <b>All Sectors 4/</b>         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |  |
| New England                   | 5.75 | 6.24 | 6.19 | 6.12 | 6.14 | 6.10 | 6.02 | 5.90 | 5.80 | 5.72 | 5.66 | 5.55 | 5.48 | 5.41 | 5.34 | 5.31 | 5.28 | 5.28 | 5.27 | 5.28 | 5.29 | 5.33 | -0.3%     |  |
| Middle Atlantic               | 5.62 | 5.96 | 5.90 | 5.86 | 5.84 | 5.84 | 5.81 | 5.79 | 5.74 | 5.70 | 5.64 | 5.53 | 5.46 | 5.42 | 5.37 | 5.31 | 5.26 | 5.23 | 5.22 | 5.21 | 5.23 | 5.25 | -0.3%     |  |
| East North Central            | 4.50 | 4.69 | 4.71 | 4.69 | 4.69 | 4.75 | 4.75 | 4.78 | 4.76 | 4.73 | 4.70 | 4.67 | 4.64 | 4.63 | 4.62 | 4.59 | 4.55 | 4.54 | 4.51 | 4.48 | 4.50 | 4.52 | 0.0%      |  |
| West North Central            | 4.42 | 4.70 | 4.75 | 4.77 | 4.79 | 4.81 | 4.83 | 4.84 | 4.85 | 4.83 | 4.81 | 4.78 | 4.76 | 4.75 | 4.72 | 4.68 | 4.62 | 4.61 | 4.60 | 4.60 | 4.63 | 4.66 | 0.2%      |  |
| South Atlantic                | 4.49 | 4.69 | 4.70 | 4.69 | 4.63 | 4.63 | 4.62 | 4.64 | 4.66 | 4.69 | 4.70 | 4.68 | 4.67 | 4.67 | 4.66 | 4.66 | 4.67 | 4.68 | 4.68 | 4.68 | 4.68 | 4.70 | 0.2%      |  |
| East South Central            | 3.88 | 4.30 | 4.25 | 4.23 | 4.20 | 4.16 | 4.16 | 4.18 | 4.22 | 4.22 | 4.22 | 4.20 | 4.20 | 4.21 | 4.22 | 4.23 | 4.25 | 4.26 | 4.28 | 4.28 | 4.30 | 4.33 | 0.5%      |  |
| West South Central            | 2.73 | 3.02 | 3.00 | 2.99 | 2.98 | 3.02 | 3.08 | 3.15 | 3.22 | 3.26 | 3.29 | 3.30 | 3.33 | 3.37 | 3.40 | 3.43 | 3.46 | 3.49 | 3.52 | 3.54 | 3.56 | 3.61 | 1.3%      |  |
| Mountain                      | 3.84 | 3.80 | 3.81 | 3.87 | 4.08 | 4.28 | 4.38 | 4.50 | 4.59 | 4.69 | 4.75 | 4.79 | 4.81 | 4.81 | 4.80 | 4.79 | 4.80 | 4.82 | 4.84 | 4.85 | 4.86 | 4.88 | 1.1%      |  |
| Pacific                       | 4.13 | 4.20 | 4.27 | 4.33 | 4.39 | 4.46 | 4.52 | 4.56 | 4.59 | 4.62 | 4.62 | 4.62 | 4.61 | 4.59 | 4.56 | 4.52 | 4.49 | 4.47 | 4.45 | 4.44 | 4.45 | 4.49 | 0.4%      |  |
| Average                       | 4.03 | 4.27 | 4.28 | 4.28 | 4.28 | 4.32 | 4.35 | 4.39 | 4.41 | 4.43 | 4.43 | 4.41 | 4.41 | 4.41 | 4.41 | 4.40 | 4.39 | 4.38 | 4.38 | 4.38 | 4.40 | 4.43 | 0.4%      |  |

1/ Excludes lease and plant fuel and includes consumption by cogenerators.

2/ Includes all electric power generators except cogenerators, which produce electricity and another form of thermal energy.

3/ Compressed natural gas used as a vehicle fuel, including federal and state fuel taxes. Excludes dispensing charges for fleet vehicles.

4/ Weighted average price. Weights used are the sector consumption values.

Btu = British thermal unit.

N/A = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 residential and commercial sector values: Energy Information Administration (EIA), Natural Gas Monthly, DOE/EIA-0130(99/6) (Washington, D.C., June 1999). 1998 industrial natural gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. Other 1998 values and projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 86. Natural Gas Pipeline Capacity By Census Division (1 of 1)  
(Design Capacity in Billions of Cubic Feet per Year)**

|                                 | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Capacity Entering Region 1/     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| New England                     | 1023  | 1293  | 1341  | 1422  | 1472  | 1497  | 1497  | 1497  | 1497  | 1497  | 1497  | 1502  | 1512  | 1522  | 1532  | 1542  | 1557  | 1578  | 1601  | 1626  | 1653  | 1682  | 2.3%      |
| Mid Atlantic                    | 4520  | 4634  | 4800  | 4869  | 4919  | 4969  | 4994  | 4994  | 4994  | 4994  | 4994  | 4994  | 4994  | 4994  | 4994  | 4994  | 5011  | 5032  | 5045  | 5060  | 5076  | 5092  | 0.5%      |
| East North Central              | 7989  | 8408  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8732  | 8796  | 8919  | 9031  | 0.6%      |
| West North Central              | 6006  | 6190  | 6281  | 6381  | 6481  | 6581  | 6641  | 6662  | 6691  | 6723  | 6754  | 6806  | 6855  | 6924  | 7013  | 7127  | 7271  | 7429  | 7614  | 7785  | 7918  | 8036  | 1.3%      |
| South Atlantic                  | 5301  | 5451  | 5538  | 5602  | 5602  | 5602  | 5602  | 5651  | 5839  | 5931  | 6007  | 6159  | 6274  | 6358  | 6442  | 6515  | 6611  | 6683  | 6748  | 6773  | 6799  | 6821  | 1.2%      |
| East South Central              | 8602  | 9205  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 9254  | 0.3%      |
| West South Central              | 1792  | 1792  | 1846  | 1846  | 1846  | 1846  | 1846  | 1846  | 1846  | 1846  | 1846  | 1846  | 1846  | 1846  | 1852  | 1858  | 1867  | 1876  | 1887  | 1897  | 1905  | 1911  | 0.3%      |
| Mountain                        | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | 2469  | N/A       |
| Pacific                         | 3829  | 3843  | 3843  | 3846  | 3862  | 3871  | 3873  | 3960  | 4028  | 4111  | 4211  | 4316  | 4390  | 4492  | 4580  | 4673  | 4750  | 4816  | 4880  | 4919  | 4957  | 4995  | 1.2%      |
| Total                           | 41531 | 43283 | 44103 | 44421 | 44638 | 44821 | 44908 | 45065 | 45349 | 45557 | 45764 | 46078 | 46327 | 46591 | 46867 | 47164 | 47521 | 47867 | 48229 | 48579 | 48950 | 49290 | 0.8%      |
| United States(Pipeline Imports) | 4503  | 5023  | 5241  | 5461  | 5661  | 5836  | 5921  | 5942  | 5963  | 5986  | 6009  | 6044  | 6089  | 6136  | 6183  | 6232  | 6286  | 6348  | 6412  | 6480  | 6550  | 6624  | 1.8%      |
| Capacity Exiting Region 2/      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| New England                     | 95    | 119   | 157   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 172   | 2.7%      |
| Mid Atlantic                    | 1929  | 2026  | 2039  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 2054  | 0.3%      |
| East North Central              | 3053  | 3251  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3606  | 3623  | 3644  | 3657  | 3672  | 3688  | 3704  | 0.9%      |
| West North Central              | 4395  | 4814  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5138  | 5203  | 5325  | 5437  | 1.0%      |
| South Atlantic                  | 3345  | 3412  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 3504  | 0.2%      |
| East South Central              | 7234  | 7295  | 7376  | 7441  | 7441  | 7441  | 7441  | 7490  | 7678  | 7770  | 7846  | 7998  | 8113  | 8197  | 8280  | 8353  | 8449  | 8521  | 8586  | 8611  | 8638  | 8659  | 0.8%      |
| West South Central              | 13641 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 14338 | 0.2%      |
| Mountain                        | 4488  | 4533  | 4618  | 4621  | 4638  | 4646  | 4648  | 4736  | 4811  | 4904  | 5011  | 5139  | 5227  | 5361  | 5506  | 5682  | 5871  | 6063  | 6281  | 6460  | 6595  | 6713  | 1.8%      |
| Pacific                         | 229   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 357   | 2.0%      |
| Total                           | 38411 | 40146 | 41135 | 41232 | 41248 | 41257 | 41259 | 41395 | 41658 | 41843 | 42027 | 42306 | 42510 | 42727 | 42956 | 43204 | 43506 | 43792 | 44088 | 44371 | 44672 | 44938 | 0.7%      |
| United States(Pipeline Exports) | 1384  | 1886  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2272  | 2.3%      |

1/ Includes only the sum of capacity levels for the States bounding the respective regions including pipeline import capacity.

2/ Includes only the sum of capacity levels for the States bounding the respective regions including pipeline export capacity.

N/A = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports.

Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 87. Natural Gas Pipeline Capacity Utilization 1/ By Census Division (1 of 1)  
(Fraction)**

|                                | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |  |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--|
| Utilization Entering Region    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |  |
| New England                    | 0.60 | 0.52 | 0.53 | 0.51 | 0.49 | 0.49 | 0.52 | 0.56 | 0.59 | 0.61 | 0.62 | 0.66 | 0.67 | 0.69 | 0.71 | 0.71 | 0.72 | 0.71 | 0.70 | 0.69 | 0.69 | 0.67 | 0.5%      |  |
| Mid Atlantic                   | 0.63 | 0.64 | 0.62 | 0.62 | 0.61 | 0.62 | 0.64 | 0.66 | 0.69 | 0.71 | 0.72 | 0.75 | 0.77 | 0.78 | 0.79 | 0.81 | 0.83 | 0.83 | 0.83 | 0.82 | 0.82 | 0.81 | 1.2%      |  |
| East North Central             | 0.67 | 0.69 | 0.65 | 0.66 | 0.67 | 0.67 | 0.68 | 0.69 | 0.71 | 0.73 | 0.74 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.80 | 0.81 | 0.82 | 0.83 | 0.83 | 0.82 | 1.0%      |  |
| West North Central             | 0.62 | 0.66 | 0.66 | 0.67 | 0.67 | 0.66 | 0.67 | 0.67 | 0.68 | 0.67 | 0.67 | 0.67 | 0.66 | 0.66 | 0.66 | 0.65 | 0.65 | 0.65 | 0.64 | 0.63 | 0.63 | 0.62 | 0.0%      |  |
| South Atlantic                 | 0.69 | 0.66 | 0.63 | 0.62 | 0.63 | 0.64 | 0.67 | 0.69 | 0.69 | 0.70 | 0.69 | 0.70 | 0.70 | 0.71 | 0.71 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 | 0.71 | 0.70 | 0.1%      |  |
| East South Central             | 0.66 | 0.60 | 0.57 | 0.56 | 0.57 | 0.59 | 0.62 | 0.64 | 0.67 | 0.70 | 0.71 | 0.75 | 0.77 | 0.79 | 0.80 | 0.82 | 0.84 | 0.85 | 0.86 | 0.87 | 0.86 | 0.86 | 1.2%      |  |
| West South Central             | 0.27 | 0.33 | 0.34 | 0.33 | 0.32 | 0.31 | 0.30 | 0.29 | 0.28 | 0.27 | 0.25 | 0.24 | 0.23 | 0.22 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.23 | -0.7%     |  |
| Mountain                       | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.3%      |  |
| Pacific                        | 0.63 | 0.67 | 0.66 | 0.67 | 0.69 | 0.70 | 0.71 | 0.71 | 0.72 | 0.72 | 0.72 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.72 | 0.6%      |  |
| Average2/                      | 0.60 | 0.60 | 0.59 | 0.59 | 0.59 | 0.60 | 0.61 | 0.63 | 0.64 | 0.65 | 0.66 | 0.68 | 0.68 | 0.69 | 0.70 | 0.70 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.7%      |  |
| United States(Pipeline Import) | 0.82 | 0.82 | 0.82 | 0.81 | 0.80 | 0.78 | 0.77 | 0.77 | 0.79 | 0.79 | 0.80 | 0.81 | 0.82 | 0.82 | 0.83 | 0.84 | 0.84 | 0.85 | 0.85 | 0.85 | 0.85 | 0.84 | 0.1%      |  |
| Utilization Exiting Region     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |  |
| New England                    | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | N/A       |  |
| Mid Atlantic                   | 0.37 | 0.37 | 0.38 | 0.38 | 0.37 | 0.38 | 0.40 | 0.42 | 0.43 | 0.44 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.47 | 0.45 | 0.43 | 0.42 | 0.41 | 0.40 | 0.3%      |  |
| East North Central             | 0.63 | 0.61 | 0.53 | 0.53 | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.57 | 0.58 | 0.59 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.59 | 0.58 | 0.57 | 0.57 | 0.57 | -0.4%     |  |
| West North Central             | 0.67 | 0.71 | 0.68 | 0.69 | 0.70 | 0.70 | 0.72 | 0.73 | 0.76 | 0.76 | 0.77 | 0.77 | 0.77 | 0.78 | 0.78 | 0.79 | 0.80 | 0.81 | 0.82 | 0.83 | 0.83 | 0.84 | 1.0%      |  |
| South Atlantic                 | 0.58 | 0.56 | 0.52 | 0.52 | 0.53 | 0.54 | 0.56 | 0.58 | 0.60 | 0.61 | 0.62 | 0.64 | 0.66 | 0.67 | 0.69 | 0.71 | 0.72 | 0.72 | 0.73 | 0.73 | 0.72 | 0.71 | 1.0%      |  |
| East South Central             | 0.68 | 0.66 | 0.63 | 0.62 | 0.63 | 0.64 | 0.67 | 0.69 | 0.69 | 0.71 | 0.72 | 0.74 | 0.75 | 0.76 | 0.77 | 0.78 | 0.79 | 0.79 | 0.79 | 0.80 | 0.79 | 0.78 | 0.7%      |  |
| West South Central             | 0.55 | 0.51 | 0.48 | 0.48 | 0.48 | 0.49 | 0.51 | 0.53 | 0.55 | 0.57 | 0.57 | 0.60 | 0.61 | 0.62 | 0.62 | 0.63 | 0.64 | 0.64 | 0.64 | 0.64 | 0.63 | 0.62 | 0.6%      |  |
| Mountain                       | 0.41 | 0.48 | 0.48 | 0.51 | 0.53 | 0.53 | 0.54 | 0.55 | 0.56 | 0.56 | 0.55 | 0.56 | 0.56 | 0.56 | 0.56 | 0.57 | 0.58 | 0.58 | 0.59 | 0.59 | 0.60 | 0.60 | 1.8%      |  |
| Pacific                        | 0.64 | 0.41 | 0.42 | 0.42 | 0.42 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.45 | 0.45 | -1.6%     |  |
| Average 2/                     | 0.57 | 0.56 | 0.54 | 0.54 | 0.55 | 0.55 | 0.57 | 0.59 | 0.60 | 0.61 | 0.62 | 0.64 | 0.64 | 0.65 | 0.66 | 0.67 | 0.67 | 0.67 | 0.68 | 0.67 | 0.67 | 0.67 | 0.7%      |  |
| United States(Pipeline Export) | 0.41 | 0.31 | 0.26 | 0.27 | 0.27 | 0.28 | 0.28 | 0.28 | 0.29 | 0.29 | 0.30 | 0.30 | 0.31 | 0.31 | 0.32 | 0.32 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | -1.0%     |  |

1/ Capacity utilization is defined as the annual throughput volume divided by the design capacity (Table 87).

2/ Weighted average utilization. Weights used are the regional pipeline capacity levels provided in Table 77.

N/A = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports.

Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 88. Domestic Coal Supply, Disposition, and Prices (1 of 1)**

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Sources of Supply(million short tons)            |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Distribution From                                |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Appalachia 1/                                    | 403.3  | 374.8  | 379.9  | 386.1  | 391.5  | 396.8  | 395.6  | 384.6  | 375.2  | 376.1  | 383.3  | 371.2  | 365.5  | 366.0  | 365.4  | 366.2  | 363.4  | 358.2  | 349.3  | 339.1  | 337.1  | 336.3  | -0.8%     |
| Interior   | 167.3  | 139.5  | 149.4  | 148.6  | 180.6  | 172.1  | 168.8  | 172.7  | 168.9  | 154.1  | 176.0  | 146.1  | 145.6  | 145.9  | 146.2  | 146.5  | 146.9  | 146.9  | 148.3  | 150.3  | 152.0  | 154.9  | -0.3%     |
| Northern Great Plains                            | 383.6  | 463.8  | 454.6  | 465.7  | 441.3  | 464.7  | 477.6  | 492.7  | 499.5  | 506.1  | 506.9  | 511.6  | 519.1  | 523.6  | 529.4  | 532.8  | 541.1  | 546.7  | 560.6  | 575.0  | 584.3  | 591.4  | 2.0%      |
| Other West and Non-Contiguous                    | 97.6   | 95.7   | 106.9  | 111.2  | 114.4  | 115.9  | 116.9  | 117.3  | 127.7  | 140.1  | 114.8  | 148.9  | 152.1  | 151.2  | 153.5  | 153.9  | 160.7  | 165.3  | 170.7  | 174.3  | 175.0  | 175.6  | 2.7%      |
| Total Distribution<br>(excludes exports) 2/      | 1051.7 | 1073.7 | 1090.7 | 1111.5 | 1127.8 | 1149.5 | 1158.8 | 1167.3 | 1171.3 | 1176.4 | 1181.0 | 1177.7 | 1182.2 | 1186.8 | 1194.5 | 1199.4 | 1212.1 | 1217.1 | 1228.9 | 1238.7 | 1248.4 | 1258.3 | 0.8%      |
| Imports  | 8.7    | 10.2   | 12.1   | 12.3   | 13.4   | 14.1   | 15.3   | 15.6   | 16.3   | 16.5   | 16.7   | 17.0   | 17.2   | 17.5   | 17.7   | 18.0   | 18.2   | 18.5   | 18.7   | 19.0   | 19.3   | 19.5   | 3.7%      |
| Total Supply                                     | 1060.5 | 1083.9 | 1102.8 | 1123.8 | 1141.3 | 1163.6 | 1174.2 | 1182.9 | 1187.6 | 1192.9 | 1197.7 | 1194.7 | 1199.5 | 1204.2 | 1212.2 | 1217.4 | 1230.4 | 1235.5 | 1247.6 | 1257.7 | 1267.7 | 1277.8 | 0.9%      |
| Consumption (million short tons)                 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Residential/Commercial                           | 6.3    | 6.7    | 6.7    | 6.7    | 6.7    | 6.7    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 0.4%      |
| Industrial                                       | 69.0   | 70.7   | 70.5   | 70.7   | 71.3   | 72.0   | 72.7   | 73.0   | 73.2   | 73.2   | 73.1   | 73.2   | 73.1   | 73.3   | 73.5   | 73.8   | 74.1   | 74.1   | 74.3   | 74.5   | 74.8   | 75.1   | 0.4%      |
| Coke Plants                                      | 28.3   | 27.4   | 27.0   | 26.6   | 26.2   | 25.9   | 25.5   | 25.2   | 24.7   | 24.3   | 23.9   | 23.5   | 23.0   | 22.6   | 22.2   | 21.8   | 21.5   | 21.1   | 20.7   | 20.4   | 20.0   | 19.7   | -1.6%     |
| Electricity                                      | 938.9  | 981.3  | 999.0  | 1020.1 | 1037.6 | 1059.7 | 1070.2 | 1079.3 | 1084.6 | 1089.3 | 1095.0 | 1091.7 | 1097.3 | 1102.7 | 1110.8 | 1116.7 | 1129.3 | 1134.7 | 1147.0 | 1157.2 | 1167.0 | 1177.2 | 1.0%      |
| Total Consumption                                | 1042.7 | 1086.1 | 1103.2 | 1124.1 | 1141.9 | 1164.4 | 1175.2 | 1184.3 | 1189.3 | 1193.6 | 1198.8 | 1195.2 | 1200.3 | 1205.5 | 1213.4 | 1219.2 | 1231.7 | 1236.9 | 1248.9 | 1259.0 | 1268.8 | 1279.0 | 0.9%      |
| Discrepancy 3/                                   | 17.7   | -2.2   | -0.3   | -0.3   | -0.6   | -0.7   | -1.0   | -1.4   | -1.6   | -0.7   | -1.1   | -0.5   | -0.8   | -1.3   | -1.2   | -1.9   | -1.4   | -1.3   | -1.3   | -1.2   | -1.1   | -1.1   | N/A       |
| Delivered Prices<br>(1998 dollars per short ton) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Industrial                                       | 32.26  | 30.52  | 30.03  | 29.66  | 29.46  | 29.05  | 28.71  | 28.50  | 28.23  | 28.01  | 27.75  | 27.44  | 27.15  | 26.89  | 26.65  | 26.48  | 26.27  | 26.02  | 25.82  | 25.63  | 25.41  | 25.24  | -1.1%     |
| Coke Plants                                      | 46.06  | 46.87  | 46.32  | 45.88  | 45.39  | 44.99  | 44.57  | 44.15  | 43.86  | 43.52  | 43.09  | 42.93  | 42.67  | 42.19  | 42.02  | 41.83  | 41.72  | 41.32  | 41.03  | 40.63  | 40.35  | 40.19  | -0.6%     |
| Electricity                                      | 25.64  | 25.18  | 24.34  | 23.87  | 23.51  | 23.24  | 22.96  | 22.75  | 22.60  | 22.46  | 21.94  | 22.13  | 21.95  | 21.72  | 21.54  | 21.34  | 21.19  | 20.94  | 20.71  | 20.41  | 20.15  | 20.01  | -1.1%     |
| Average Price 4/                                 | 26.65  | 26.08  | 25.25  | 24.76  | 24.39  | 24.09  | 23.79  | 23.56  | 23.39  | 23.23  | 22.72  | 22.86  | 22.67  | 22.42  | 22.22  | 22.02  | 21.86  | 21.60  | 21.35  | 21.05  | 20.78  | 20.63  | -1.2%     |

1/ Includes waste coal delivered to Independent Power Producers (IPP) that is not included in other Energy Information Administration coal distribution tables. The totals for this table include this waste coal tonnage.

2/ Includes distribution to unknown destinations.

3/ Includes stock changes.

4/ Weighted average excludes residential/commercial prices.

Appalachia: PA, OH, MD, WV, VA, TN, AL, Eastern KY.

Interior: Western KY, IL, IN, IA, MO, KS, OK, AR, TX, LA.

Northern Great Plains: ND, SD, MT, WY.

Other West and Non-Contiguous: CO, UT, AZ, NM, WA, AK.

N/A = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 89. Coal Production and Minemouth Prices by Region (1 of 1)**

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--|
| Production(million short tons/year)      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Appalachia 2/                            | 469.89 | 429.21 | 433.91 | 439.76 | 445.47 | 450.68 | 449.37 | 439.46 | 431.18 | 433.36 | 439.87 | 427.13 | 420.91 | 419.93 | 416.70 | 415.89 | 411.59 | 407.01 | 398.31 | 387.60 | 385.21 | 385.09 | -0.9%     |  |
| Interior                                 | 168.37 | 139.69 | 149.64 | 148.84 | 180.84 | 172.24 | 168.96 | 172.81 | 169.02 | 154.15 | 176.07 | 146.10 | 145.57 | 145.94 | 146.16 | 146.50 | 146.94 | 146.86 | 148.30 | 150.31 | 152.00 | 154.92 | -0.4%     |  |
| Northern Great Plains                    | 387.78 | 468.54 | 459.16 | 470.04 | 445.53 | 468.77 | 481.56 | 496.57 | 503.28 | 509.75 | 510.42 | 515.02 | 522.43 | 526.96 | 532.82 | 536.30 | 544.63 | 550.22 | 564.17 | 578.68 | 588.05 | 595.20 | 2.0%      |  |
| Other West and Non-Contiguous            | 101.60 | 99.01  | 110.57 | 115.33 | 118.59 | 120.22 | 121.19 | 121.74 | 132.18 | 144.62 | 119.33 | 153.49 | 156.76 | 155.96 | 158.32 | 158.73 | 165.54 | 170.24 | 175.71 | 179.35 | 180.04 | 180.70 | 2.7%      |  |
| Appalachia 2/                            | 469.89 | 429.21 | 433.91 | 439.76 | 445.47 | 450.68 | 449.37 | 439.46 | 431.18 | 433.36 | 439.87 | 427.13 | 420.91 | 419.93 | 416.70 | 415.89 | 411.59 | 407.01 | 398.31 | 387.60 | 385.21 | 385.09 | -0.9%     |  |
| Interior                                 | 168.37 | 139.69 | 149.64 | 148.84 | 180.84 | 172.24 | 168.96 | 172.81 | 169.02 | 154.15 | 176.07 | 146.10 | 145.57 | 145.94 | 146.16 | 146.50 | 146.94 | 146.86 | 148.30 | 150.31 | 152.00 | 154.92 | -0.4%     |  |
| West                                     | 489.38 | 567.55 | 569.72 | 585.37 | 564.11 | 588.99 | 602.75 | 618.30 | 635.46 | 654.37 | 629.75 | 668.50 | 679.19 | 682.92 | 691.14 | 695.03 | 710.17 | 720.46 | 739.89 | 758.04 | 768.09 | 775.91 | 2.1%      |  |
| East of Mississippi River                | 580.06 | 528.48 | 548.89 | 555.38 | 593.98 | 594.51 | 592.72 | 590.33 | 581.50 | 570.48 | 597.46 | 559.33 | 553.80 | 553.50 | 550.88 | 550.83 | 547.26 | 542.89 | 535.81 | 527.19 | 526.63 | 527.94 | -0.4%     |  |
| West of Mississippi River                | 547.58 | 607.97 | 604.39 | 618.60 | 596.45 | 617.40 | 628.36 | 640.25 | 654.16 | 671.40 | 648.22 | 682.40 | 691.87 | 695.29 | 703.11 | 706.59 | 721.44 | 731.45 | 750.68 | 768.76 | 778.67 | 787.98 | 1.7%      |  |
| U.S. Total                               | 1127.6 | 1136.4 | 1153.3 | 1174.0 | 1190.4 | 1211.9 | 1221.1 | 1230.6 | 1235.7 | 1241.9 | 1245.7 | 1241.7 | 1245.7 | 1248.8 | 1254.0 | 1257.4 | 1268.7 | 1274.3 | 1286.5 | 1296.0 | 1305.3 | 1315.9 | 0.7%      |  |
| Minemouth Prices(1998 dollars/short ton) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |  |
| Appalachia                               | 26.14  | 25.51  | 24.81  | 24.36  | 23.85  | 23.59  | 23.29  | 23.10  | 22.96  | 22.84  | 22.46  | 22.74  | 22.80  | 22.64  | 22.52  | 22.55  | 22.46  | 22.25  | 22.04  | 21.82  | 21.73  | 21.75  | -0.8%     |  |
| Interior                                 | 17.81  | 17.58  | 17.67  | 17.36  | 17.73  | 17.49  | 17.26  | 17.33  | 17.19  | 16.82  | 16.97  | 16.44  | 16.33  | 16.16  | 16.07  | 15.92  | 15.91  | 15.66  | 15.62  | 15.39  | 15.22  | 15.13  | -0.7%     |  |
| Northern Great Plains                    | 6.10   | 5.77   | 5.49   | 5.28   | 5.10   | 4.98   | 4.86   | 4.78   | 4.72   | 4.65   | 4.58   | 4.47   | 4.43   | 4.43   | 4.42   | 4.43   | 4.41   | 4.43   | 4.44   | 4.43   | 4.42   | 4.43   | -1.4%     |  |
| Other West and Non-Contiguous            | 20.67  | 19.98  | 19.62  | 19.25  | 19.08  | 18.77  | 18.52  | 18.36  | 18.24  | 18.21  | 18.03  | 18.07  | 17.97  | 17.93  | 17.89  | 17.74  | 17.72  | 17.65  | 17.63  | 17.55  | 17.38  | 17.40  | -0.8%     |  |
| Appalachia                               | 26.14  | 25.51  | 24.81  | 24.36  | 23.85  | 23.59  | 23.29  | 23.10  | 22.96  | 22.84  | 22.46  | 22.74  | 22.80  | 22.64  | 22.52  | 22.55  | 22.46  | 22.25  | 22.04  | 21.82  | 21.73  | 21.75  | -0.8%     |  |
| Interior                                 | 17.81  | 17.58  | 17.67  | 17.36  | 17.73  | 17.49  | 17.26  | 17.33  | 17.19  | 16.82  | 16.97  | 16.44  | 16.33  | 16.16  | 16.07  | 15.92  | 15.91  | 15.66  | 15.62  | 15.39  | 15.22  | 15.13  | -0.7%     |  |
| West                                     | 9.13   | 8.25   | 8.24   | 8.03   | 8.04   | 7.80   | 7.61   | 7.45   | 7.54   | 7.64   | 7.13   | 7.59   | 7.55   | 7.51   | 7.51   | 7.47   | 7.52   | 7.55   | 7.57   | 7.53   | 7.46   | 7.45   | -0.9%     |  |
| East of Mississippi River                | 24.99  | 24.36  | 23.68  | 23.24  | 22.65  | 22.40  | 22.08  | 21.84  | 21.65  | 21.55  | 21.18  | 21.36  | 21.34  | 21.17  | 21.04  | 21.00  | 20.91  | 20.67  | 20.46  | 20.18  | 20.03  | 20.01  | -1.0%     |  |
| West of Mississippi River                | 9.59   | 8.57   | 8.45   | 8.24   | 8.24   | 7.97   | 7.77   | 7.59   | 7.65   | 7.75   | 7.25   | 7.68   | 7.63   | 7.59   | 7.59   | 7.55   | 7.59   | 7.63   | 7.64   | 7.60   | 7.53   | 7.53   | -1.1%     |  |
| U.S. Total                               | 17.51  | 15.91  | 15.69  | 15.33  | 15.43  | 15.05  | 14.71  | 14.43  | 14.24  | 14.09  | 13.93  | 13.84  | 13.73  | 13.61  | 13.50  | 13.44  | 13.34  | 13.18  | 12.98  | 12.72  | 12.57  | 12.54  | -1.5%     |  |

1/ Coal Production Regions:

Appalachia: PA, OH, MD, WV, VA, TN, AL, Eastern KY.

Interior: Western KY, IL, IN, IA, MO, KS, OK, AR, TX, LA.

Northern Great Plains: ND, SD, MT, WY.

Other West and Non-Contiguous: CO, UT, AZ, NM, WA, AK.

2/ Includes waste coal delivered to Independent Power Producers (IPP) that is not included in other Energy Information Administration coal distribution tables. The

totals for this table include this waste coal tonnage.

N/A = Not applicable

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 90. Coal Production by Region and Type (million short tons per year) (1 of 2)**

|   | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |       |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|
| Northern Appalachia                       | 167.25 | 173.67 | 194.83 | 206.27 | 222.86 | 220.44 | 206.43 | 189.35 | 180.06 | 181.77 | 196.05 | 183.86 | 177.13 | 182.31 | 180.15 | 179.92 | 174.52 | 174.50 | 173.51 | 172.94 | 170.45 | 167.96 | 0.0%      |       |
| Medium Sulfur (Premium) 1/                | 5.39   | 11.06  | 11.55  | 11.54  | 11.51  | 11.68  | 11.00  | 10.61  | 10.59  | 10.09  | 9.75   | 9.15   | 9.02   | 8.96   | 9.07   | 8.84   | 8.78   | 7.90   | 7.42   | 7.39   | 7.13   | 6.25   | 0.7%      |       |
| Low Sulfur (Bituminous) 2/                | 2.82   | 16.72  | 11.04  | 11.55  | 9.86   | 11.60  | 12.88  | 14.16  | 17.75  | 19.59  | 16.61  | 23.34  | 25.48  | 26.20  | 25.81  | 25.68  | 25.16  | 23.76  | 21.44  | 18.44  | 16.72  | 17.56  | 8.7%      |       |
| Medium Sulfur (Bituminous) 2/             | 80.84  | 78.01  | 107.50 | 117.75 | 119.67 | 121.80 | 113.09 | 96.55  | 85.84  | 86.66  | 102.03 | 93.09  | 84.13  | 88.39  | 86.03  | 84.18  | 78.77  | 80.71  | 82.15  | 84.25  | 83.50  | 81.98  | 0.1%      |       |
| High Sulfur (Bituminous)                  | 68.70  | 52.23  | 51.30  | 52.16  | 67.52  | 62.99  | 56.60  | 54.93  | 52.44  | 51.61  | 53.35  | 43.82  | 43.78  | 43.76  | 43.77  | 45.43  | 45.45  | 45.42  | 45.40  | 45.38  | 45.35  | 44.04  | -2.0%     |       |
| High Sulfur (Gob) 3/                      | 9.50   | 15.64  | 13.43  | 13.28  | 14.31  | 12.38  | 12.86  | 13.09  | 13.44  | 13.81  | 14.30  | 14.45  | 14.72  | 15.00  | 15.47  | 15.79  | 16.36  | 16.71  | 17.10  | 17.48  | 17.75  | 18.12  | 3.0%      |       |
| Central Appalachia                        | 276.93 | 240.20 | 226.87 | 221.71 | 210.96 | 219.82 | 233.41 | 241.05 | 242.55 | 242.90 | 235.96 | 233.67 | 233.97 | 227.81 | 227.04 | 226.20 | 227.48 | 223.37 | 216.14 | 206.47 | 206.89 | 208.94 | -1.3%     |       |
| Medium Sulfur (Premium) 1/                | 59.75  | 46.71  | 45.56  | 45.17  | 45.50  | 45.84  | 46.20  | 46.58  | 46.92  | 47.27  | 46.01  | 44.99  | 45.72  | 43.66  | 42.55  | 42.61  | 42.67  | 43.64  | 44.14  | 44.07  | 44.22  | 45.14  | -1.3%     |       |
| Low Sulfur (Bituminous)                   | 72.74  | 68.03  | 65.17  | 63.12  | 53.27  | 60.75  | 68.75  | 68.72  | 69.21  | 68.87  | 68.13  | 79.49  | 86.96  | 90.18  | 90.46  | 89.80  | 91.23  | 88.21  | 82.97  | 74.91  | 75.38  | 74.77  | 0.1%      |       |
| Medium Sulfur (Bituminous)                | 144.45 | 125.46 | 116.14 | 113.43 | 112.20 | 113.22 | 118.46 | 125.76 | 126.42 | 126.75 | 121.83 | 109.20 | 101.29 | 93.97  | 94.03  | 93.79  | 93.58  | 91.51  | 89.03  | 87.49  | 87.29  | 89.03  | -2.2%     |       |
| Southern Appalachia                       | 25.71  | 15.34  | 12.21  | 11.79  | 11.65  | 10.42  | 9.53   | 9.06   | 8.57   | 8.70   | 7.85   | 9.59   | 9.81   | 9.82   | 9.50   | 9.77   | 9.59   | 9.13   | 8.65   | 8.20   | 7.87   | 8.19   | -5.1%     |       |
| Low Sulfur (Premium) 1/                   | 5.82   | 6.01   | 6.04   | 5.82   | 5.76   | 5.17   | 4.86   | 4.74   | 4.22   | 4.17   | 3.96   | 3.98   | 3.54   | 3.46   | 3.23   | 3.34   | 3.29   | 3.01   | 2.81   | 2.73   | 2.69   | 2.49   | -3.8%     |       |
| Low Sulfur (Bituminous)                   | 7.53   | 3.49   | 2.79   | 2.65   | 2.41   | 2.20   | 2.01   | 1.83   | 1.86   | 2.04   | 1.41   | 3.13   | 3.79   | 3.87   | 3.79   | 3.93   | 3.81   | 3.63   | 3.33   | 2.95   | 2.65   | 2.79   | -4.4%     |       |
| Medium Sulfur (Bituminous)                | 12.36  | 5.84   | 3.38   | 3.31   | 3.47   | 3.05   | 2.66   | 2.49   | 2.49   | 2.49   | 2.48   | 2.48   | 2.48   | 2.48   | 2.48   | 2.49   | 2.50   | 2.50   | 2.51   | 2.52   | 2.53   | 2.91   | -6.4%     |       |
| Eastern Interior                          | 110.18 | 99.27  | 114.98 | 115.61 | 148.51 | 143.83 | 143.35 | 150.87 | 150.32 | 137.12 | 157.59 | 132.20 | 132.89 | 133.57 | 134.19 | 134.94 | 135.67 | 135.88 | 137.50 | 139.59 | 141.42 | 142.85 | 1.2%      |       |
| Medium Sulfur (Bituminous)                | 36.24  | 38.31  | 53.45  | 55.72  | 62.02  | 57.72  | 57.27  | 65.01  | 64.73  | 53.20  | 71.72  | 57.70  | 61.62  | 59.35  | 62.39  | 61.91  | 61.93  | 63.43  | 63.66  | 63.83  | 65.18  | 65.41  | 2.7%      |       |
| High Sulfur (Bituminous)                  | 73.94  | 60.95  | 61.53  | 59.89  | 86.49  | 86.11  | 86.08  | 85.86  | 85.59  | 83.92  | 85.87  | 74.51  | 71.27  | 74.22  | 71.79  | 73.03  | 73.74  | 72.45  | 73.85  | 75.75  | 76.24  | 77.44  | 0.2%      |       |
| Western Interior High Sulfur (Bituminous) | 2.40   | 2.20   | 1.94   | 1.86   | 1.86   | 1.87   | 1.88   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.89   | 1.90   | 1.91   | 1.91   | 1.91   | 1.92   | 1.93   | 1.93   | 1.94      | -1.0% |
| Gulf                                      | 55.80  | 38.22  | 32.73  | 31.38  | 30.47  | 26.54  | 23.73  | 20.05  | 16.81  | 15.14  | 16.59  | 12.00  | 10.79  | 10.48  | 10.07  | 9.66   | 9.36   | 9.07   | 8.87   | 8.80   | 8.65   | 10.13  | -7.5%     |       |
| Medium Sulfur (Lignite)                   | 28.94  | 20.30  | 7.37   | 6.84   | 6.32   | 5.76   | 5.31   | 4.93   | 4.93   | 4.93   | 4.93   | 4.93   | 4.92   | 4.93   | 4.93   | 4.95   | 4.97   | 4.97   | 4.99   | 5.00   | 5.02   | 6.75   | -6.4%     |       |
| High Sulfur (Lignite)                     | 26.86  | 17.92  | 25.35  | 24.54  | 24.15  | 20.78  | 18.41  | 15.13  | 11.87  | 10.21  | 11.66  | 7.08   | 5.87   | 5.56   | 5.14   | 4.71   | 4.39   | 4.09   | 3.89   | 3.80   | 3.64   | 3.38   | -9.0%     |       |
| Dakota Medium Sulfur (Lignite)            | 30.86  | 31.37  | 31.14  | 32.64  | 34.05  | 34.64  | 34.71  | 34.75  | 34.76  | 34.77  | 35.51  | 28.86  | 27.22  | 27.34  | 26.25  | 24.43  | 23.65  | 22.63  | 21.92  | 22.27  | 21.70  | 19.52  | -2.1%     |       |
| Powder/Green River                        | 356.92 | 437.17 | 428.01 | 437.39 | 411.47 | 434.12 | 446.85 | 461.82 | 468.51 | 474.98 | 474.91 | 486.16 | 495.21 | 499.62 | 506.57 | 511.86 | 520.97 | 527.59 | 542.25 | 556.42 | 566.35 | 575.69 | 2.2%      |       |
| Low Sulfur (Bituminous)                   | 1.72   | 1.16   | 1.15   | 1.16   | 0.89   | 0.45   | 0.25   | 0.21   | 0.21   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | 0.20   | -9.4%     |       |
| Low Sulfur (Sub-Bituminous)               | 318.84 | 384.71 | 392.86 | 402.98 | 381.42 | 399.77 | 409.89 | 421.29 | 424.80 | 429.33 | 429.63 | 436.95 | 444.59 | 448.26 | 454.43 | 458.97 | 467.43 | 473.43 | 487.52 | 501.19 | 510.48 | 517.13 | 2.2%      |       |
| Medium Sulfur (Sub-Bituminous)            | 36.36  | 51.31  | 34.00  | 33.26  | 29.16  | 33.90  | 36.72  | 40.32  | 43.50  | 45.45  | 45.08  | 49.00  | 50.42  | 51.16  | 51.94  | 52.70  | 53.34  | 53.96  | 54.54  | 55.03  | 55.68  | 58.36  | 2.2%      |       |
| Rocky Mountain                            | 55.71  | 61.98  | 73.10  | 77.46  | 80.35  | 82.07  | 83.39  | 84.28  | 95.07  | 107.85 | 82.90  | 117.39 | 121.00 | 120.52 | 123.21 | 123.95 | 131.08 | 136.10 | 141.89 | 145.84 | 146.84 | 147.81 | 4.5%      |       |
| Low Sulfur (Bituminous)                   | 45.78  | 53.68  | 66.46  | 71.16  | 74.69  | 76.98  | 78.80  | 80.16  | 91.36  | 104.50 | 79.89  | 114.68 | 118.56 | 118.33 | 121.24 | 122.18 | 129.48 | 134.66 | 140.60 | 144.66 | 145.79 | 146.60 | 5.4%      |       |
| Low Sulfur (Sub-Bituminous)               | 9.93   | 8.30   | 6.64   | 6.29   | 5.66   | 5.10   | 4.59   | 4.13   | 3.72   | 3.34   | 3.01   | 2.71   | 2.44   | 2.19   | 1.97   | 1.78   | 1.60   | 1.44   | 1.30   | 1.18   | 1.05   | 1.21   | -9.1%     |       |
| Arizona/New Mexico                        | 39.91  | 31.56  | 31.98  | 32.37  | 32.76  | 32.70  | 32.38  | 32.06  | 31.74  | 31.43  | 31.12  | 30.81  | 30.50  | 30.20  | 29.91  | 29.61  | 29.32  | 29.03  | 28.75  | 28.46  | 28.18  | 27.91  | -1.6%     |       |
| Low Sulfur (Bituminous)                   | 26.76  | 23.17  | 23.41  | 23.63  | 23.85  | 23.78  | 23.54  | 23.31  | 23.08  | 22.84  | 22.62  | 22.39  | 22.17  | 21.95  | 21.73  | 21.51  | 21.29  | 21.08  | 20.87  | 20.66  | 20.46  | 20.25  | -1.3%     |       |
| Medium Sulfur (Sub-Bituminous)            | 13.16  | 8.39   | 8.57   | 8.74   | 8.91   | 8.92   | 8.83   | 8.75   | 8.67   | 8.58   | 8.50   | 8.42   | 8.34   | 8.26   | 8.18   | 8.10   | 8.03   | 7.95   | 7.88   | 7.80   | 7.73   | 7.65   | -2.4%     |       |

**Table 90. Coal Production by Region and Type (million short tons per year) (2 of 2)**

|                                | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Washington/Alaska              |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Medium Sulfur (Sub-Bituminous) | 5.98   | 5.47   | 5.48   | 5.51   | 5.48   | 5.45   | 5.42   | 5.39   | 5.37   | 5.34   | 5.31   | 5.29   | 5.26   | 5.23   | 5.20   | 5.17   | 5.14   | 5.11   | 5.08   | 5.05   | 5.02   | 4.99   | -0.8%     |
| Subtotals: All Regions         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Premium Metallurgical 1/       | 70.96  | 63.77  | 63.15  | 62.52  | 62.77  | 62.69  | 62.07  | 61.93  | 61.73  | 61.54  | 59.71  | 58.12  | 58.28  | 56.09  | 54.85  | 54.79  | 54.73  | 54.55  | 54.37  | 54.20  | 54.04  | 53.88  | -1.2%     |
| Bituminous                     | 576.26 | 529.27 | 565.27 | 577.39 | 618.19 | 622.52 | 622.26 | 620.88 | 622.86 | 624.58 | 628.04 | 625.92 | 623.61 | 624.78 | 625.61 | 626.03 | 629.05 | 629.48 | 627.92 | 622.95 | 623.22 | 624.93 | 0.4%      |
| Sub-Bituminous                 | 384.26 | 458.18 | 447.56 | 456.77 | 430.63 | 453.13 | 465.45 | 479.88 | 486.05 | 492.04 | 491.53 | 502.37 | 511.05 | 515.11 | 521.72 | 526.72 | 535.54 | 541.89 | 556.30 | 570.25 | 579.95 | 589.33 | 2.0%      |
| Lignite                        | 96.16  | 85.23  | 77.30  | 77.30  | 78.83  | 73.56  | 71.30  | 67.89  | 65.01  | 63.73  | 66.39  | 55.31  | 52.73  | 52.82  | 51.80  | 49.88  | 49.37  | 48.41  | 47.90  | 48.55  | 48.10  | 47.77  | -3.1%     |
| Low Sulfur                     | 491.93 | 565.27 | 575.57 | 588.36 | 557.81 | 585.80 | 605.56 | 618.54 | 636.19 | 654.90 | 625.46 | 686.87 | 707.72 | 714.65 | 722.86 | 727.38 | 743.49 | 749.42 | 761.03 | 766.92 | 775.42 | 783.00 | 2.1%      |
| Medium Sulfur                  | 454.32 | 422.23 | 424.14 | 433.90 | 438.29 | 441.98 | 439.68 | 441.15 | 434.22 | 425.54 | 453.15 | 413.11 | 400.41 | 393.72 | 393.06 | 389.17 | 383.35 | 384.33 | 383.30 | 384.69 | 384.98 | 387.99 | -0.7%     |
| High Sulfur                    | 181.40 | 148.95 | 153.55 | 151.72 | 194.33 | 184.13 | 175.84 | 170.89 | 165.24 | 161.44 | 167.07 | 141.74 | 137.53 | 140.43 | 138.07 | 140.86 | 141.85 | 140.58 | 142.15 | 144.33 | 144.90 | 144.93 | -1.0%     |
| U.S. Total                     | 1127.6 | 1136.4 | 1153.3 | 1174.0 | 1190.4 | 1211.9 | 1221.1 | 1230.6 | 1235.7 | 1241.9 | 1245.7 | 1241.7 | 1245.7 | 1248.8 | 1254.0 | 1257.4 | 1268.7 | 1274.3 | 1286.5 | 1295.9 | 1305.3 | 1315.9 | 0.7%      |

1/ "Premium" coal is used to make metallurgical coke.

2/ Includes Pennsylvania anthracite.

3/ Waste coal delivered to Independent Power Producers (IPP) that is not included in other Energy Information Administration coal production tables. The totals for this table include this waste coal tonnage.

Northern Appalachia: PA,MD,OH,N.WV (PA anthracite is included under low and medium sulfur bituminous).

Central Appalachia: S.WV,VA,E.KY

Southern Appalachia: AL,TN.

Eastern Interior: IL,IN,W.KY.

Western Interior (Bituminous Only): IA,MO,KS,OK,AR,TX.

Gulf (Lignite Only): TX,LA,AR.

Dakota: ND,SD,E.MT(Lignite Only).

Powder/Green River: WY,MT(Sub-Bituminous and Bituminous)

Rocky Mountains: CO,UT.

Sulfur Definitions:

Low Sulfur: 0 - 0.60 pounds of sulfur per million Btu.

Medium Sulfur: 0.61 - 1.67 pounds of sulfur per million Btu.

High Sulfur: Over 1.67 pounds of sulfur per million Btu.

Btu = British thermal unit.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports.

Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 91. Coal Prices by Region and Type ( 1998 Dollars per Short Ton) (1 of 2)**

|   | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Northern Appalachia                       | 24.35 | 24.61 | 24.10 | 23.67 | 23.17 | 23.01 | 22.50 | 22.20 | 22.07 | 21.92 | 21.43 | 21.75 | 21.77 | 21.57 | 21.42 | 21.39 | 21.24 | 20.94 | 20.61 | 20.31 | 20.13 | 20.11 | -0.9%     |
| Medium Sulfur (Premium) 1/                | 38.75 | 39.37 | 38.77 | 38.20 | 37.81 | 37.52 | 36.99 | 36.62 | 36.44 | 36.07 | 35.71 | 35.71 | 35.53 | 35.18 | 35.21 | 35.05 | 35.20 | 34.92 | 34.74 | 34.44 | 34.27 | 34.23 | -0.6%     |
| Low Sulfur (Bituminous) 2/                | 32.30 | 36.08 | 34.21 | 33.70 | 32.99 | 33.24 | 32.99 | 33.05 | 33.24 | 33.37 | 32.48 | 33.38 | 33.44 | 33.13 | 32.94 | 32.92 | 32.80 | 32.56 | 32.37 | 32.10 | 31.90 | 32.05 | 0.0%      |
| Medium Sulfur (Bituminous) 2/             | 24.94 | 24.05 | 24.13 | 23.66 | 23.21 | 22.81 | 22.21 | 21.79 | 21.27 | 20.99 | 20.94 | 20.66 | 20.41 | 20.25 | 20.04 | 20.04 | 19.88 | 19.80 | 19.71 | 19.65 | 19.61 | 19.61 | -1.1%     |
| High Sulfur (Bituminous)                  | 24.16 | 22.62 | 22.03 | 21.58 | 21.88 | 21.39 | 20.75 | 20.31 | 19.87 | 19.65 | 19.54 | 18.98 | 18.88 | 18.68 | 18.67 | 18.75 | 18.56 | 18.46 | 18.36 | 18.35 | 18.33 | 18.23 | -1.3%     |
| High Sulfur (Gob) 3/                      | 10.25 | 11.40 | 10.86 | 10.55 | 10.44 | 10.03 | 9.88  | 9.77  | 9.72  | 9.62  | 9.42  | 9.45  | 9.44  | 9.47  | 9.60  | 9.78  | 9.92  | 10.00 | 10.09 | 10.23 | 10.37 | 10.54 | 0.1%      |
| Central Appalachia                        | 26.21 | 25.47 | 24.80 | 24.41 | 23.94 | 23.64 | 23.53 | 23.39 | 23.23 | 23.15 | 22.97 | 23.07 | 23.13 | 23.04 | 22.97 | 23.02 | 22.96 | 22.86 | 22.79 | 22.69 | 22.68 | 22.69 | -0.7%     |
| Medium Sulfur (Premium) 1/                | 29.17 | 28.15 | 27.59 | 27.29 | 26.75 | 26.35 | 26.22 | 25.96 | 25.83 | 25.79 | 25.58 | 25.56 | 25.31 | 25.31 | 25.44 | 25.44 | 25.31 | 25.29 | 25.15 | 25.15 | 25.15 | 25.27 | -0.7%     |
| Low Sulfur (Bituminous)                   | 26.87 | 26.48 | 25.72 | 25.35 | 24.63 | 24.56 | 24.68 | 24.49 | 24.36 | 24.22 | 24.16 | 24.42 | 24.57 | 24.42 | 24.36 | 24.41 | 24.36 | 24.22 | 24.14 | 24.02 | 23.95 | 23.98 | -0.5%     |
| Medium Sulfur (Bituminous)                | 24.66 | 23.92 | 23.19 | 22.74 | 22.46 | 22.04 | 21.82 | 21.83 | 21.66 | 21.59 | 21.32 | 21.06 | 20.80 | 20.67 | 20.57 | 20.59 | 20.48 | 20.37 | 20.29 | 20.32 | 20.33 | 20.30 | -0.9%     |
| Southern Appalachia                       | 36.98 | 36.25 | 36.30 | 35.67 | 35.31 | 34.93 | 34.50 | 34.30 | 33.76 | 33.53 | 33.01 | 33.50 | 33.36 | 33.08 | 32.85 | 32.87 | 32.81 | 32.38 | 32.11 | 31.72 | 31.50 | 31.25 | -0.8%     |
| Low Sulfur (Premium) 1/                   | 43.17 | 42.97 | 42.38 | 41.80 | 41.41 | 41.10 | 40.55 | 40.15 | 39.93 | 39.53 | 39.13 | 39.08 | 38.86 | 38.46 | 38.44 | 38.23 | 38.34 | 38.00 | 37.77 | 37.42 | 37.20 | 37.11 | -0.7%     |
| Low Sulfur (Bituminous)                   | 38.83 | 35.76 | 34.49 | 33.85 | 33.47 | 32.96 | 32.43 | 32.04 | 31.85 | 32.20 | 30.72 | 33.47 | 34.06 | 33.80 | 33.61 | 33.58 | 33.45 | 33.20 | 33.00 | 32.50 | 32.28 | 32.44 | -0.8%     |
| Medium Sulfur (Bituminous)                | 32.93 | 29.62 | 26.92 | 26.37 | 26.48 | 25.88 | 25.01 | 24.83 | 24.72 | 24.57 | 24.58 | 24.59 | 24.45 | 24.43 | 24.41 | 24.54 | 24.56 | 24.43 | 24.57 | 24.61 | 24.61 | 25.09 | -1.2%     |
| Eastern Interior                          | 20.11 | 19.41 | 19.39 | 18.96 | 19.03 | 18.64 | 18.28 | 18.17 | 17.88 | 17.46 | 17.60 | 16.92 | 16.74 | 16.54 | 16.42 | 16.23 | 16.21 | 15.92 | 15.87 | 15.61 | 15.41 | 15.33 | -1.2%     |
| Medium Sulfur (Bituminous)                | 20.31 | 19.93 | 20.22 | 19.74 | 19.56 | 19.18 | 18.83 | 18.81 | 18.62 | 18.07 | 18.40 | 17.62 | 17.50 | 17.33 | 17.20 | 17.04 | 17.03 | 16.73 | 16.66 | 16.39 | 16.18 | 16.11 | -1.0%     |
| High Sulfur (Bituminous)                  | 20.01 | 19.09 | 18.68 | 18.23 | 18.65 | 18.28 | 17.91 | 17.69 | 17.32 | 17.08 | 16.93 | 16.38 | 16.09 | 15.91 | 15.74 | 15.55 | 15.51 | 15.22 | 15.18 | 14.95 | 14.76 | 14.66 | -1.4%     |
| Western Interior High Sulfur (Bituminous) | 23.83 | 24.06 | 23.34 | 23.22 | 23.22 | 23.33 | 23.44 | 23.43 | 23.54 | 23.52 | 23.51 | 23.49 | 23.36 | 23.35 | 23.33 | 23.44 | 23.43 | 23.53 | 23.63 | 23.62 | 23.60 | 23.71 | 0.0%      |
| Gulf                                      | 13.00 | 12.43 | 11.26 | 11.11 | 11.04 | 10.86 | 10.61 | 10.42 | 10.28 | 10.17 | 10.23 | 10.06 | 10.00 | 10.02 | 10.03 | 10.02 | 10.02 | 10.08 | 10.06 | 10.08 | 10.09 | 10.67 | -0.9%     |
| Medium Sulfur (Lignite)                   | 14.66 | 14.06 | 12.32 | 12.18 | 12.08 | 11.99 | 11.80 | 11.70 | 11.75 | 11.75 | 11.75 | 11.75 | 11.70 | 11.70 | 11.70 | 11.64 | 11.63 | 11.69 | 11.62 | 11.61 | 11.61 | 12.07 | -0.9%     |
| High Sulfur (Lignite)                     | 11.21 | 10.58 | 10.95 | 10.81 | 10.77 | 10.55 | 10.26 | 10.00 | 9.67  | 9.41  | 9.59  | 8.88  | 8.58  | 8.54  | 8.43  | 8.31  | 8.19  | 8.13  | 8.06  | 8.06  | 8.00  | 7.87  | -1.6%     |
| Dakota Medium Sulfur (Lignite)            | 8.10  | 7.91  | 7.75  | 7.64  | 7.56  | 7.45  | 7.34  | 7.27  | 7.24  | 7.24  | 7.24  | 7.05  | 6.85  | 6.79  | 6.71  | 6.65  | 6.56  | 6.51  | 6.45  | 6.43  | 6.37  | 6.27  | -1.2%     |
| Powder/Green River                        | W     | 5.62  | 5.33  | 5.11  | 4.90  | 4.78  | 4.67  | 4.59  | 4.54  | 4.46  | 4.38  | 4.31  | 4.29  | 4.30  | 4.30  | 4.32  | 4.32  | 4.34  | 4.35  | 4.35  | 4.34  | 4.37  | W         |
| Low Sulfur (Bituminous)                   | W     | 19.11 | 20.86 | 22.53 | 23.45 | 23.23 | 22.96 | 22.96 | 23.07 | 23.30 | 23.52 | 23.75 | 23.87 | 24.10 | 24.33 | 24.45 | 24.69 | 25.05 | 25.17 | 25.41 | 25.66 | 25.78 | W         |
| Low Sulfur (Sub-Bituminous)               | W     | 5.39  | 5.18  | 4.95  | 4.76  | 4.64  | 4.53  | 4.44  | 4.37  | 4.29  | 4.20  | 4.12  | 4.10  | 4.10  | 4.10  | 4.12  | 4.12  | 4.14  | 4.16  | 4.16  | 4.16  | 4.18  | W         |
| Medium Sulfur (Sub-Bituminous)            | W     | 7.03  | 6.54  | 6.38  | 6.20  | 6.23  | 6.13  | 6.10  | 6.07  | 6.00  | 5.96  | 5.96  | 5.92  | 5.97  | 5.97  | 5.95  | 5.94  | 5.97  | 5.99  | 5.99  | 5.99  | 6.02  | W         |
| Rocky Mountain                            | 19.14 | 18.60 | 18.36 | 17.91 | 17.72 | 17.28 | 17.01 | 16.80 | 16.87 | 17.00 | 16.39 | 16.94 | 16.87 | 16.83 | 16.83 | 16.68 | 16.72 | 16.71 | 16.75 | 16.69 | 16.52 | 16.55 | -0.7%     |
| Low Sulfur (Bituminous)                   | 19.15 | 18.63 | 18.43 | 17.97 | 17.78 | 17.33 | 17.06 | 16.85 | 16.92 | 17.05 | 16.44 | 16.99 | 16.92 | 16.88 | 16.87 | 16.72 | 16.76 | 16.74 | 16.78 | 16.72 | 16.54 | 16.58 | -0.7%     |
| Low Sulfur (Sub-Bituminous)               | 19.09 | 18.44 | 17.60 | 17.34 | 16.99 | 16.56 | 16.15 | 15.83 | 15.59 | 15.28 | 15.13 | 14.82 | 14.60 | 14.46 | 14.17 | 13.96 | 13.68 | 13.48 | 13.28 | 13.15 | 13.03 | 13.10 | -1.7%     |
| Arizona/New Mexico                        | W     | 22.04 | 21.84 | 21.73 | 21.71 | 21.77 | 21.64 | 21.69 | 21.58 | 21.58 | 21.57 | 21.57 | 21.46 | 21.41 | 21.41 | 21.30 | 21.30 | 21.20 | 21.09 | 21.09 | 20.93 | 20.98 | W         |
| Low Sulfur (Bituminous)                   | W     | 23.59 | 23.35 | 23.22 | 23.22 | 23.33 | 23.20 | 23.20 | 23.08 | 23.08 | 23.08 | 23.08 | 22.97 | 22.97 | 22.97 | 22.85 | 22.85 | 22.74 | 22.62 | 22.62 | 22.40 | 22.51 | W         |
| Medium Sulfur (Sub-Bituminous)            | W     | 17.74 | 17.73 | 17.70 | 17.69 | 17.59 | 17.50 | 17.67 | 17.57 | 17.56 | 17.55 | 17.55 | 17.46 | 17.28 | 17.28 | 17.20 | 17.20 | 17.11 | 17.03 | 17.03 | 17.03 | 16.94 | W         |

**Table 91. Coal Prices by Region and Type ( 1998 Dollars per Short Ton) (2 of 2)**

|                                | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Washington/Alaska              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Medium Sulfur (Sub-Bituminous) | W     | 23.75 | 23.52 | 23.40 | 23.17 | 23.05 | 22.93 | 22.93 | 22.82 | 22.82 | 22.82 | 22.82 | 22.93 | 22.93 | 22.93 | 22.82 | 22.82 | 22.70 | 22.59 | 22.59 | 22.59 | 22.47 | W         |
| Average by Type: All Regions   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Premium Metallurgical 1/       | 31.05 | 31.49 | 31.05 | 30.65 | 30.12 | 29.65 | 29.25 | 28.87 | 28.61 | 28.41 | 28.13 | 28.10 | 27.91 | 27.70 | 27.72 | 27.77 | 27.78 | 27.40 | 27.23 | 27.03 | 26.95 | 26.86 | -0.7%     |
| Bituminous                     | 23.95 | 23.26 | 22.52 | 22.08 | 21.61 | 21.32 | 21.03 | 20.81 | 20.58 | 20.45 | 20.26 | 20.28 | 20.23 | 20.12 | 20.00 | 19.93 | 19.82 | 19.61 | 19.41 | 19.15 | 18.98 | 18.98 | -1.1%     |
| Sub-Bituminous                 | 6.95  | 6.25  | 5.93  | 5.69  | 5.52  | 5.37  | 5.23  | 5.13  | 5.05  | 4.95  | 4.86  | 4.78  | 4.74  | 4.72  | 4.72  | 4.71  | 4.71  | 4.71  | 4.69  | 4.68  | 4.70  | 4.70  | -1.8%     |
| Lignite                        | 11.16 | 10.58 | 9.78  | 9.55  | 9.43  | 9.12  | 8.89  | 8.69  | 8.54  | 8.45  | 8.46  | 8.33  | 8.22  | 8.19  | 8.22  | 8.29  | 8.33  | 8.38  | 8.42  | 8.46  | 8.51  | 8.82  | -1.1%     |
| Low Sulfur                     | 12.51 | 11.65 | 11.04 | 10.67 | 10.34 | 10.25 | 10.25 | 10.07 | 10.22 | 10.32 | 9.71  | 10.62 | 10.79 | 10.79 | 10.72 | 10.66 | 10.64 | 10.49 | 10.24 | 9.88  | 9.72  | 9.71  | -1.1%     |
| Medium Sulfur                  | 22.02 | 20.69 | 21.22 | 20.87 | 20.66 | 20.20 | 19.74 | 19.42 | 19.06 | 18.84 | 18.74 | 18.40 | 18.13 | 17.91 | 17.79 | 17.78 | 17.68 | 17.55 | 17.47 | 17.37 | 17.30 | 17.25 | -1.1%     |
| High Sulfur                    | 19.82 | 18.57 | 17.90 | 17.57 | 18.23 | 17.97 | 17.50 | 17.31 | 17.03 | 16.86 | 16.68 | 16.20 | 16.04 | 15.89 | 15.81 | 15.80 | 15.73 | 15.55 | 15.50 | 15.38 | 15.29 | 15.20 | -1.2%     |
| U.S. Average                   | 17.51 | 15.91 | 15.69 | 15.33 | 15.43 | 15.05 | 14.71 | 14.43 | 14.24 | 14.09 | 13.93 | 13.84 | 13.73 | 13.61 | 13.50 | 13.44 | 13.34 | 13.18 | 12.98 | 12.72 | 12.57 | 12.54 | -1.5%     |

1/ "Premium" coal is used to make metallurgical coke.

2/ Includes Pennsylvania anthracite.

3/ Waste coal delivered to Independent Power Producers (IPP) that is not included in other Energy Information Administration coal tables. The averages for this table include this waste coal tonnage.

Northern Appalachia: PA,MD,OH,N.WV (PA. anthracite is included under low and medium sulfur bituminous).

Central Appalachia: S.WV,VA,E.KY

Southern Appalachia: AL,TN.

Eastern Interior: IL,IN,W.KY.

Western Interior (Bituminous Only): IA,MO,KS,OK,AR,TX.

Gulf (Lignite Only): TX,LA,AR.

Dakota: ND,SD,E.MT(Lignite Only).

Powder/Green River: WY,MT(Sub-Bituminous and Bituminous)

Rocky Mountains: CO,UT.

Sulfur Definitions:

Low Sulfur: 0 - 0.60 pounds of sulfur per million Btu.

Medium Sulfur: 0.61 - 1.67 pounds of sulfur per million Btu.

High Sulfur: Over 1.67 pounds of sulfur per million Btu.

Btu = British thermal unit.

W = Withheld.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports.

Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 92. World Steam Coal Flows By Importing Regions and Exporting Countries 1,2/ (1 of 2)**  
(Million Short Tons)

|                                 | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1998-                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Steam Coal Exports to Europe 3/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                       | 11.2  | 9.1   | 9.2   | 9.3   | 9.4   | 9.5   | 9.6   | 9.7   | 9.8   | 9.7   | 10.1  | 10.0  | 9.5   | 9.0   | 8.9   | 8.8   | 8.6   | 8.5   | 8.4   | 8.0   | 7.9   | 8.2   | -1.4% |
| United States                   | 8.4   | 9.7   | 9.9   | 10.1  | 9.9   | 9.7   | 10.1  | 11.2  | 12.3  | 13.5  | 14.3  | 15.0  | 14.1  | 14.1  | 12.4  | 10.4  | 7.5   | 8.7   | 8.8   | 8.0   | 7.3   | 7.7   | -0.4% |
| South Africa                    | 45.9  | 42.2  | 42.9  | 43.6  | 43.9  | 44.9  | 45.5  | 44.6  | 44.8  | 44.9  | 45.0  | 45.1  | 46.0  | 46.9  | 47.7  | 48.6  | 49.5  | 47.7  | 46.4  | 46.2  | 46.2  | 46.3  | 0.0%  |
| Former U.S.S.R                  | 8.9   | 11.0  | 11.1  | 11.2  | 11.4  | 11.5  | 11.6  | 11.7  | 11.8  | 11.9  | 12.0  | 12.1  | 12.1  | 12.1  | 12.1  | 12.1  | 12.1  | 12.1  | 12.1  | 12.1  | 12.1  | 12.1  | 1.4%  |
| Poland                          | 14.4  | 13.2  | 12.8  | 12.4  | 12.0  | 11.6  | 11.2  | 10.6  | 10.0  | 9.3   | 8.7   | 8.0   | 7.8   | 7.5   | 7.3   | 7.0   | 6.7   | 6.5   | 6.2   | 6.0   | 5.8   | 5.5   | -4.3% |
| Canada                          | 0.7   | 4.2   | 4.3   | 4.4   | 5.6   | 6.1   | 6.3   | 5.5   | 4.9   | 4.9   | 5.0   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   | 9.4%  |
| China                           | 2.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| South America                   | 25.5  | 28.4  | 29.0  | 29.6  | 30.2  | 30.8  | 31.4  | 31.7  | 32.0  | 32.4  | 32.7  | 33.6  | 33.6  | 34.5  | 34.9  | 35.6  | 37.2  | 37.2  | 38.1  | 39.0  | 39.3  | 38.1  | 1.8%  |
| Indonesia 4/                    | 2.5   | 8.5   | 8.9   | 9.3   | 9.3   | 9.4   | 9.3   | 9.4   | 9.3   | 8.1   | 6.2   | 4.2   | 2.3   | 2.1   | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.0   | 0.0   | 0.0   | N/A   |
| Total                           | 119.8 | 126.3 | 128.1 | 129.8 | 131.6 | 133.4 | 135.1 | 134.4 | 133.6 | 132.7 | 131.9 | 131.2 | 130.2 | 129.2 | 128.4 | 127.6 | 127.0 | 126.0 | 125.2 | 124.5 | 123.8 | 123.0 | 0.1%  |
| Steam Coal Exports to Asia      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                       | 77.3  | 90.9  | 95.4  | 99.8  | 105.0 | 110.3 | 114.8 | 118.3 | 121.8 | 125.2 | 128.7 | 132.2 | 133.6 | 134.9 | 136.3 | 137.7 | 139.0 | 140.5 | 142.1 | 143.6 | 145.1 | 146.6 | 3.0%  |
| United States                   | 5.0   | 3.3   | 3.7   | 4.1   | 4.2   | 4.3   | 4.3   | 4.4   | 4.4   | 4.5   | 4.6   | 4.6   | 4.7   | 4.7   | 4.8   | 4.8   | 4.9   | 4.9   | 5.0   | 5.0   | 5.1   | 5.1   | 0.1%  |
| South Africa                    | 14.8  | 26.7  | 27.4  | 28.1  | 29.1  | 29.4  | 30.2  | 32.0  | 32.9  | 33.8  | 34.6  | 35.5  | 35.7  | 36.0  | 36.3  | 36.5  | 36.8  | 38.6  | 40.1  | 40.2  | 40.3  | 40.3  | 4.7%  |
| Former U.S.S.R                  | 2.5   | 2.6   | 2.7   | 2.7   | 2.7   | 2.7   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.9   | 3.0   | 3.1   | 3.2   | 3.3   | 3.4   | 3.5   | 3.6   | 3.7   | 3.9   | 2.0%  |
| Poland                          | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Canada                          | 5.2   | 2.9   | 3.2   | 3.4   | 2.6   | 2.4   | 2.5   | 3.7   | 4.8   | 5.2   | 5.6   | 6.0   | 5.9   | 4.0   | 4.1   | 4.3   | 4.5   | 3.1   | 2.2   | 2.5   | 2.9   | 3.3   | -2.0% |
| China                           | 25.7  | 34.6  | 35.5  | 36.3  | 37.1  | 38.0  | 38.8  | 39.2  | 39.7  | 40.1  | 40.6  | 41.0  | 41.4  | 41.9  | 42.3  | 42.8  | 43.2  | 43.9  | 44.5  | 45.2  | 45.9  | 46.5  | 2.7%  |
| South America                   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Indonesia 4/                    | 39.9  | 46.7  | 47.5  | 48.5  | 49.7  | 51.0  | 52.2  | 52.9  | 54.6  | 57.2  | 59.7  | 62.2  | 63.4  | 66.5  | 67.5  | 68.5  | 69.4  | 70.5  | 71.6  | 72.7  | 73.7  | 74.8  | 2.9%  |
| Total                           | 170.3 | 207.8 | 215.3 | 222.9 | 230.5 | 238.0 | 245.6 | 253.3 | 261.0 | 268.7 | 276.5 | 284.2 | 287.6 | 291.1 | 294.4 | 297.8 | 301.1 | 305.1 | 309.0 | 312.8 | 316.7 | 320.6 | 2.9%  |
| Steam Coal Export to America    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                       | 2.5   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.8   | 1.3   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.9   | 0.9   | -4.6% |
| United States                   | 17.6  | 12.5  | 12.0  | 11.5  | 11.1  | 10.8  | 10.4  | 10.1  | 9.8   | 9.5   | 9.2   | 8.9   | 8.6   | 9.0   | 8.9   | 9.0   | 10.1  | 9.4   | 9.4   | 9.6   | 9.7   | 9.9   | -2.6% |
| South Africa                    | 0.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 8.4%  |
| Former U.S.S.R                  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Poland                          | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Canada                          | 0.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| China                           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| South America                   | 9.9   | 17.2  | 18.7  | 20.3  | 21.8  | 23.4  | 24.9  | 25.4  | 25.8  | 26.3  | 26.7  | 26.6  | 27.5  | 27.5  | 28.0  | 28.3  | 27.6  | 28.8  | 29.1  | 29.3  | 29.5  | 29.8  | 5.1%  |
| Indonesia 4/                    | 2.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Total                           | 33.0  | 32.7  | 33.7  | 34.8  | 36.0  | 37.2  | 38.4  | 38.6  | 38.8  | 38.9  | 39.1  | 39.3  | 39.3  | 39.7  | 40.2  | 40.6  | 40.9  | 41.4  | 41.8  | 42.1  | 42.5  | 42.9  | 1.2%  |

**Table 92. World Steam Coal Flows By Importing Regions and Exporting Countries 1,2/ (2 of 2)  
(Million Short Tons)**

|                             | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Total Steam Coal Exports 5/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Australia                   | 92.2  | 100.6 | 105.2 | 109.8 | 115.1 | 120.4 | 125.1 | 128.7 | 132.3 | 135.7 | 139.5 | 143.5 | 143.8 | 144.8 | 146.0 | 147.2 | 148.5 | 149.9 | 151.3 | 152.4 | 153.8 | 155.7 | 2.4%      |
| United States               | 31.0  | 25.5  | 25.5  | 25.7  | 25.2  | 24.7  | 24.8  | 25.7  | 26.5  | 27.5  | 28.1  | 28.5  | 27.4  | 27.8  | 26.1  | 24.3  | 22.5  | 23.0  | 23.2  | 22.6  | 22.2  | 22.7  | -1.4%     |
| South Africa                | 66.3  | 71.3  | 72.7  | 74.0  | 75.4  | 76.7  | 78.0  | 79.0  | 80.0  | 81.0  | 82.0  | 83.0  | 84.2  | 85.3  | 86.4  | 87.6  | 88.7  | 88.8  | 88.8  | 88.9  | 88.9  | 89.0  | 1.3%      |
| Former U.S.S.R              | 11.4  | 13.7  | 13.8  | 13.9  | 14.1  | 14.2  | 14.3  | 14.4  | 14.6  | 14.7  | 14.8  | 14.9  | 15.0  | 15.1  | 15.2  | 15.3  | 15.4  | 15.5  | 15.7  | 15.8  | 15.9  | 16.0  | 1.5%      |
| Poland                      | 14.4  | 13.2  | 12.8  | 12.4  | 12.0  | 11.6  | 11.2  | 10.6  | 10.0  | 9.3   | 8.7   | 8.0   | 7.8   | 7.5   | 7.3   | 7.0   | 6.7   | 6.5   | 6.2   | 6.0   | 5.8   | 5.5   | -4.3%     |
| Canada                      | 6.4   | 7.2   | 7.5   | 7.8   | 8.2   | 8.5   | 8.8   | 9.3   | 9.7   | 10.1  | 10.6  | 11.0  | 10.9  | 9.1   | 9.1   | 9.3   | 9.5   | 8.2   | 7.3   | 7.5   | 8.0   | 8.4   | 1.2%      |
| China                       | 30.2  | 34.6  | 35.5  | 36.3  | 37.1  | 38.0  | 38.8  | 39.2  | 39.7  | 40.1  | 40.6  | 41.0  | 41.4  | 41.9  | 42.3  | 42.8  | 43.2  | 43.9  | 44.5  | 45.2  | 45.9  | 46.5  | 2.0%      |
| South America               | 38.9  | 45.5  | 47.7  | 49.8  | 52.0  | 54.2  | 56.3  | 57.1  | 57.9  | 58.6  | 59.4  | 60.2  | 61.1  | 62.0  | 63.0  | 63.9  | 64.8  | 66.0  | 67.2  | 68.3  | 68.9  | 67.9  | 2.6%      |
| Indonesia 4/                | 55.0  | 55.2  | 56.4  | 57.7  | 59.0  | 60.3  | 61.6  | 62.1  | 62.7  | 63.3  | 63.9  | 64.5  | 65.5  | 66.5  | 67.5  | 68.6  | 69.6  | 70.6  | 71.7  | 72.7  | 73.7  | 74.8  | 1.4%      |
| Total                       | 345.6 | 366.8 | 377.2 | 387.5 | 398.1 | 408.6 | 419.1 | 426.2 | 433.3 | 440.4 | 447.5 | 454.7 | 457.2 | 460.0 | 463.0 | 466.0 | 469.0 | 472.4 | 475.9 | 479.5 | 483.0 | 486.4 | 1.6%      |

Note: Totals may not equal sum of components due to independent rounding.

1/ Import Regions: Europe: Algeria, Austria, Belgium, Bulgaria, Croatia, Denmark, Egypt, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, Malta, Morocco, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Tunisia, Turkey, United Kingdom; Asia: Bangladesh, China, Hong Kong, India, Iran, Japan, Malaysia, North Korea, Pakistan, Philippines, South Korea, Sri Lanka, Taiwan, Thailand; America: Argentina, Brazil, Canada, Chile, Mexico, United States.

2/ Excludes non-seaborne shipments of coal to Europe and Asia.

3/ Coal exports to Europe include exports to the Middle East and Northern Africa.

4/ In 1998, steam coal exports from Indonesia include an additional 8.3 million short tons of exports from other countries not included in the forecast period.

5/ In 1998, total world coal flows include a balancing item term used by the International Energy Agency to reconcile discrepancies between reported exports and imports. For 1998, the balancing item for steam coal amounted to 22.5 million short tons.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 data: International Energy Agency, Coal Information 1998, (Paris, France, July 1999); and Energy Information Administration, Quarterly Coal Report, October-December 1998, DOE/EIA-0121(98/4Q) (Washington, DC, July 1999). Projections: AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 93. World Metallurgical Coal Flows By Importing and Exporting Countries 1,2/ (1 of 2)  
(Million Short Tons)**

|  | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1998-  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| <b>Metallurgical Coal Exports to Europe 3/</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                                      | 17.9  | 23.8  | 26.9  | 27.9  | 28.0  | 28.5  | 29.6  | 29.6  | 29.5  | 29.5  | 31.3  | 32.9  | 32.6  | 35.0  | 36.3  | 36.2  | 36.1  | 36.1  | 36.0  | 35.9  | 35.9  | 35.8  | 3.2%  |       |
| United States                                  | 28.6  | 21.7  | 21.3  | 20.9  | 21.3  | 21.3  | 20.8  | 20.8  | 20.8  | 20.8  | 19.1  | 17.7  | 18.0  | 15.8  | 14.7  | 14.7  | 14.7  | 14.6  | 14.6  | 14.5  | 14.5  | 14.4  | -3.1% |       |
| South Africa                                   | 1.2   | 1.4   | 1.4   | 1.4   | 1.3   | 1.3   | 1.3   | 1.3   | 1.2   | 1.2   | 1.2   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.0   | 1.0   | 1.0   | 0.9   | 0.9   | -1.2% |       |
| Former U.S.S.R                                 | 1.7   | 1.8   | 1.8   | 1.8   | 1.7   | 1.7   | 1.7   | 1.6   | 1.6   | 1.6   | 1.6   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | -0.4% |       |
| Poland   | 6.0   | 5.0   | 4.7   | 4.5   | 4.2   | 4.0   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.6   | 3.6   | 3.6   | 3.6   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.4   | 3.4   | -2.5% |
| Canada   | 6.7   | 6.7   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.5   | 4.4   | 4.4   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   | 4.3   | -2.0% |
| China  | 0.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| South America                                  | 0.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Indonesia 4/                                   | 0.8   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.3%  |
| Total  | 63.5  | 61.3  | 61.6  | 61.9  | 62.0  | 62.3  | 62.6  | 62.5  | 62.3  | 62.2  | 62.4  | 62.5  | 62.2  | 62.4  | 62.4  | 62.3  | 62.1  | 61.9  | 61.7  | 61.5  | 61.4  | 61.2  | -0.2% |       |
| <b>Metallurgical Coal Exports to Asia 5/</b>   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                                      | 63.2  | 77.5  | 77.9  | 78.4  | 78.8  | 79.3  | 79.8  | 80.2  | 80.6  | 81.1  | 81.5  | 82.0  | 82.5  | 83.0  | 83.5  | 84.0  | 84.5  | 84.9  | 85.2  | 85.6  | 86.0  | 86.3  | 1.4%  |       |
| United States                                  | 6.7   | 1.1   | 1.1   | 1.1   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.3   | 1.3   | 1.3   | 1.3   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.4   | 1.5   | 1.5   | 1.5   | -6.6% |       |
| South Africa                                   | 4.2   | 6.1   | 6.1   | 6.1   | 6.0   | 6.0   | 6.0   | 6.0   | 6.0   | 5.9   | 5.9   | 5.9   | 5.9   | 5.9   | 5.8   | 5.8   | 5.8   | 5.8   | 5.8   | 5.7   | 5.7   | 5.7   | 1.4%  |       |
| Former U.S.S.R                                 | 3.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 0.4   | 0.5   | 0.4   | 0.8   | 0.7   | 0.6   | 0.4   | 0.5   | 0.6   | 2.8   | 2.8   | 2.8   | -0.4% |       |
| Poland   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |       |
| Canada   | 21.9  | 22.2  | 22.2  | 22.3  | 22.3  | 22.4  | 22.4  | 22.4  | 22.4  | 22.3  | 22.2  | 22.0  | 22.2  | 21.9  | 22.1  | 22.3  | 22.5  | 22.4  | 22.4  | 20.3  | 20.4  | 20.4  | -0.3% |       |
| China  | 7.7   | 5.5   | 5.6   | 5.6   | 5.6   | 5.7   | 5.7   | 5.8   | 5.9   | 5.9   | 6.0   | 6.1   | 6.1   | 6.2   | 6.2   | 6.2   | 6.3   | 6.3   | 6.4   | 6.5   | 6.5   | 6.6   | -0.7% |       |
| South America                                  | 0.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |       |
| Indonesia 4/                                   | 4.6   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.0   | 4.0   | 4.0   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | -0.5% |       |
| Total  | 111.6 | 116.4 | 117.0 | 117.5 | 118.1 | 118.6 | 119.1 | 119.7 | 120.2 | 120.8 | 121.3 | 121.9 | 122.5 | 123.1 | 123.7 | 124.3 | 124.9 | 125.4 | 125.9 | 126.4 | 126.9 | 127.4 | 0.6%  |       |
| <b>Metallurgical Coal Exports to America</b>   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                                      | 4.9   | 7.1   | 7.2   | 7.3   | 7.4   | 7.5   | 7.7   | 7.8   | 8.0   | 8.2   | 8.3   | 8.5   | 8.7   | 9.0   | 9.2   | 9.4   | 9.7   | 9.9   | 10.1  | 10.2  | 10.4  | 10.6  | 3.6%  |       |
| United States                                  | 11.8  | 14.4  | 14.6  | 14.8  | 15.0  | 15.2  | 15.4  | 15.6  | 15.8  | 16.0  | 16.2  | 16.4  | 16.7  | 17.0  | 17.4  | 17.7  | 18.0  | 18.2  | 18.4  | 18.6  | 18.8  | 19.0  | 2.2%  |       |
| South Africa                                   | 1.9   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |       |
| Former U.S.S.R                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |       |
| Poland   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |       |
| Canada   | 2.7   | 1.0   | 1.3   | 1.5   | 1.8   | 2.0   | 2.3   | 2.4   | 2.5   | 2.6   | 2.7   | 2.8   | 2.9   | 3.0   | 3.2   | 3.3   | 3.4   | 3.5   | 3.5   | 3.5   | 3.6   | 3.6   | 1.3%  |       |
| China  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |       |
| South America                                  | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |       |
| Indonesia 4/                                   | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |       |
| Total  | 21.6  | 22.5  | 23.0  | 23.6  | 24.2  | 24.7  | 25.3  | 25.8  | 26.2  | 26.7  | 27.2  | 27.7  | 28.3  | 29.0  | 29.7  | 30.4  | 31.1  | 31.5  | 31.9  | 32.4  | 32.8  | 33.3  | 2.0%  |       |

**Table 93. World Metallurgical Coal Flows By Importing and Exporting Countries 1,2/ (2 of 2)  
(Million Short Tons)**

|                                     | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-<br>2020 |       |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| Total Metallurgical Coal Exports 6/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |               |       |
| Australia                           | 91.6  | 108.4 | 112.0 | 113.6 | 114.3 | 115.4 | 117.0 | 117.6 | 118.2 | 118.7 | 121.2 | 123.4 | 123.8 | 126.9 | 129.0 | 129.6 | 130.3 | 130.8 | 131.3 | 131.8 | 132.3 | 132.8 | 1.7%          |       |
| United States                       | 47.1  | 37.2  | 37.0  | 36.8  | 37.4  | 37.7  | 37.4  | 37.6  | 37.8  | 38.1  | 36.6  | 35.5  | 36.0  | 34.2  | 33.4  | 33.7  | 34.0  | 34.2  | 34.4  | 34.6  | 34.7  | 34.9  | -1.3%         |       |
| South Africa                        | 7.6   | 7.5   | 7.5   | 7.4   | 7.4   | 7.3   | 7.2   | 7.2   | 7.1   | 7.1   | 7.1   | 7.0   | 7.0   | 6.9   | 6.9   | 6.8   | 6.8   | 6.7   | 6.7   | 6.7   | 6.7   | 6.6   | -0.6%         |       |
| Former U.S.S.R                      | 4.7   | 1.8   | 1.8   | 1.8   | 1.7   | 1.7   | 1.7   | 1.6   | 1.6   | 1.8   | 1.9   | 2.1   | 2.0   | 2.3   | 2.2   | 2.1   | 2.0   | 2.1   | 2.2   | 4.3   | 4.3   | 4.3   | -0.4%         |       |
| Poland                              | 6.0   | 5.0   | 4.7   | 4.5   | 4.2   | 4.0   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.6   | 3.6   | 3.6   | 3.6   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.4   | 3.4           | -2.5% |
| Canada                              | 31.2  | 29.8  | 28.0  | 28.3  | 28.6  | 28.9  | 29.2  | 29.3  | 29.5  | 29.4  | 29.4  | 29.3  | 29.6  | 29.4  | 29.6  | 29.9  | 30.2  | 30.1  | 30.1  | 28.1  | 28.2  | 28.3  | -0.4%         |       |
| China                               | 5.3   | 5.5   | 5.6   | 5.6   | 5.6   | 5.7   | 5.7   | 5.8   | 5.9   | 5.9   | 6.0   | 6.1   | 6.1   | 6.2   | 6.2   | 6.2   | 6.3   | 6.3   | 6.4   | 6.5   | 6.5   | 6.6   | 1.0%          |       |
| South America                       | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A           |       |
| Indonesia 4/                        | 6.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | -0.9%         |       |
| Total                               | 200.4 | 200.1 | 201.5 | 202.9 | 204.2 | 205.6 | 207.0 | 207.9 | 208.8 | 209.7 | 210.8 | 212.0 | 213.1 | 214.5 | 215.8 | 217.0 | 218.1 | 218.9 | 219.6 | 220.4 | 221.1 | 221.9 | 0.5%          |       |

Note: Totals may not equal sum of components due to independent rounding.

1/ Import Regions: Europe: Algeria, Austria, Belgium, Bulgaria, Croatia, Denmark, Egypt, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, Malta, Morocco, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Tunisia, Turkey, United Kingdom; Asia: Bangladesh, China, Hong Kong, India, Iran, Japan, Malaysia, North Korea, Pakistan, Philippines, South Korea, Sri Lanka, Taiwan, Thailand; America: Argentina, Brazil, Canada, Chile, Mexico, United States.

2/ Excludes non-seaborne shipments of coal to Europe and Asia.

3/ Coal exports to Europe include exports to the Middle East and Northern Africa.

4/ In 1998, metallurgical coal exports from Indonesia include an additional 1.0 million short tons of exports from other countries not included in for the forecast period.

5/ For 1998, includes 11.2 million short tons of coal for pulverized coal injection at blast furnaces shipped to Japanese steelmakers.

6/ In 1998, total world coal flows include a balancing item term used by the International Energy Agency to reconcile discrepancies between reported exports and imports. For 1998, the balancing item for metallurgical coal amounted to 3.7 million short tons.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 data: International Energy Agency, Coal Information 1998, (Paris, France, July 1999); and Energy Information Administration, Quarterly Coal Report, October-December 1998, DOE/EIA-0121(98/4Q) (Washington, DC, July 1999). Projections: AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 94. World Total Coal Flows By Importing and Exporting Countries 1,2/ (1 of 2)**  
(Million Short Tons)

|                                 | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2020  |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1998-                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Total Coal Exports to Europe 3/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                       | 29.1  | 32.9  | 36.1  | 37.2  | 37.4  | 38.0  | 39.2  | 39.3  | 39.3  | 39.2  | 41.4  | 42.9  | 42.1  | 44.0  | 45.2  | 45.0  | 44.8  | 44.6  | 44.5  | 44.0  | 43.8  | 44.0  | 1.9%  |
| United States                   | 37.0  | 31.4  | 31.2  | 30.9  | 31.2  | 31.0  | 30.9  | 32.0  | 33.0  | 34.2  | 33.5  | 32.7  | 32.0  | 29.9  | 27.1  | 25.1  | 22.2  | 23.4  | 23.4  | 22.5  | 21.8  | 22.1  | -2.3% |
| South Africa                    | 47.1  | 43.6  | 44.2  | 44.9  | 45.2  | 46.3  | 46.8  | 45.9  | 46.0  | 46.1  | 46.1  | 46.2  | 47.1  | 48.0  | 48.8  | 49.7  | 50.6  | 48.8  | 47.4  | 47.2  | 47.2  | 47.2  | 0.0%  |
| Former U.S.S.R                  | 10.6  | 12.8  | 12.9  | 13.0  | 13.1  | 13.2  | 13.2  | 13.3  | 13.4  | 13.5  | 13.6  | 13.7  | 13.7  | 13.7  | 13.7  | 13.7  | 13.7  | 13.7  | 13.7  | 13.7  | 13.7  | 13.7  | 1.2%  |
| Poland                          | 20.4  | 18.2  | 17.5  | 16.9  | 16.3  | 15.6  | 15.0  | 14.3  | 13.7  | 13.0  | 12.3  | 11.7  | 11.4  | 11.1  | 10.8  | 10.5  | 10.3  | 10.0  | 9.7   | 9.5   | 9.2   | 8.9   | -3.7% |
| Canada                          | 7.4   | 10.9  | 8.9   | 9.0   | 10.1  | 10.6  | 10.8  | 10.1  | 9.4   | 9.5   | 9.5   | 9.6   | 9.5   | 9.5   | 9.4   | 9.4   | 9.3   | 9.3   | 9.3   | 9.3   | 9.3   | 9.3   | 1.0%  |
| China                           | 2.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| South America                   | 25.8  | 28.4  | 29.0  | 29.6  | 30.2  | 30.8  | 31.4  | 31.7  | 32.0  | 32.4  | 32.7  | 33.6  | 33.6  | 34.5  | 34.9  | 35.6  | 37.2  | 37.2  | 38.1  | 39.0  | 39.3  | 38.1  | 1.8%  |
| Indonesia 4/                    | 3.4   | 9.4   | 9.8   | 10.2  | 10.2  | 10.2  | 10.3  | 10.2  | 9.0   | 7.1   | 5.1   | 3.2   | 3.0   | 0.9   | 0.9   | 1.0   | 1.0   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | -6.1% |
| Total                           | 183.3 | 187.6 | 189.6 | 191.7 | 193.6 | 195.7 | 197.7 | 196.8 | 195.9 | 194.9 | 194.3 | 193.6 | 192.5 | 191.6 | 190.8 | 189.9 | 189.0 | 187.9 | 186.0 | 185.1 | 184.1 | 184.1 | 0.0%  |
|                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Total Coal Exports to Asia      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                       | 140.4 | 168.3 | 173.3 | 178.2 | 183.9 | 189.6 | 194.6 | 198.5 | 202.4 | 206.3 | 210.2 | 214.1 | 216.0 | 217.9 | 219.8 | 221.7 | 223.5 | 225.4 | 227.3 | 229.2 | 231.0 | 232.9 | 2.3%  |
| United States                   | 11.7  | 4.4   | 4.8   | 5.3   | 5.4   | 5.4   | 5.5   | 5.6   | 5.7   | 5.8   | 5.9   | 6.0   | 6.0   | 6.1   | 6.2   | 6.2   | 6.3   | 6.4   | 6.4   | 6.5   | 6.6   | 6.6   | -2.6% |
| South Africa                    | 19.0  | 32.8  | 33.5  | 34.1  | 35.1  | 35.4  | 36.1  | 38.0  | 38.8  | 39.7  | 40.5  | 41.4  | 41.6  | 41.9  | 42.1  | 42.3  | 42.6  | 44.4  | 45.8  | 46.0  | 46.0  | 46.0  | 4.1%  |
| Former U.S.S.R                  | 5.5   | 2.6   | 2.7   | 2.7   | 2.7   | 2.7   | 2.8   | 2.8   | 2.8   | 3.0   | 3.1   | 3.3   | 3.3   | 3.8   | 3.8   | 3.7   | 3.7   | 4.0   | 4.2   | 6.4   | 6.5   | 6.6   | 0.8%  |
| Poland                          | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Canada                          | 27.0  | 25.1  | 25.4  | 25.7  | 24.9  | 24.8  | 24.9  | 26.2  | 27.3  | 27.5  | 27.8  | 28.0  | 28.1  | 25.9  | 26.2  | 26.6  | 26.9  | 25.6  | 24.6  | 22.8  | 23.3  | 23.8  | -0.6% |
| China                           | 33.4  | 40.1  | 41.0  | 41.9  | 42.8  | 43.7  | 44.5  | 45.0  | 45.6  | 46.1  | 46.6  | 47.1  | 47.6  | 48.0  | 48.5  | 49.0  | 49.5  | 50.2  | 51.0  | 51.7  | 52.4  | 53.1  | 2.1%  |
| South America                   | 0.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Indonesia 4/                    | 44.5  | 50.7  | 51.6  | 52.5  | 53.8  | 55.0  | 56.3  | 56.9  | 58.7  | 61.2  | 63.7  | 66.2  | 67.5  | 70.6  | 71.6  | 72.6  | 73.5  | 74.6  | 75.7  | 76.8  | 77.8  | 78.9  | 2.6%  |
| Total                           | 281.9 | 324.2 | 332.3 | 340.4 | 348.5 | 356.6 | 364.7 | 373.0 | 381.2 | 389.5 | 397.8 | 406.1 | 410.1 | 414.1 | 418.1 | 422.1 | 426.1 | 430.5 | 434.9 | 439.3 | 443.6 | 448.0 | 2.1%  |
|                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Total Coal Exports to America   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Australia                       | 7.4   | 7.7   | 7.9   | 8.0   | 8.1   | 8.2   | 8.4   | 8.5   | 8.7   | 8.9   | 9.1   | 9.8   | 9.5   | 9.7   | 10.0  | 10.2  | 10.5  | 10.7  | 10.9  | 11.1  | 11.3  | 11.5  | 2.0%  |
| United States                   | 29.4  | 26.9  | 26.5  | 26.2  | 26.1  | 25.9  | 25.8  | 25.7  | 25.6  | 25.5  | 25.4  | 25.3  | 25.4  | 26.0  | 26.3  | 26.7  | 28.1  | 27.5  | 27.8  | 28.2  | 28.6  | 28.9  | -0.1% |
| South Africa                    | 2.3   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 0.2%  |
| Former U.S.S.R                  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Poland                          | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Canada                          | 3.2   | 1.0   | 1.3   | 1.5   | 1.8   | 2.0   | 2.3   | 2.4   | 2.5   | 2.6   | 2.7   | 2.8   | 2.9   | 3.0   | 3.2   | 3.3   | 3.4   | 3.5   | 3.5   | 3.5   | 3.6   | 3.6   | 0.5%  |
| China                           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| South America                   | 10.1  | 17.2  | 18.7  | 20.3  | 21.8  | 23.4  | 24.9  | 25.4  | 25.8  | 26.3  | 26.7  | 26.6  | 27.5  | 27.5  | 28.0  | 28.3  | 27.6  | 28.8  | 29.1  | 29.3  | 29.5  | 29.8  | 5.0%  |
| Indonesia 4/                    | 2.2   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | N/A   |
| Total                           | 54.6  | 55.2  | 56.8  | 58.4  | 60.1  | 61.9  | 63.7  | 64.3  | 65.0  | 65.6  | 66.3  | 67.0  | 67.7  | 68.7  | 69.9  | 71.0  | 72.0  | 72.9  | 73.7  | 74.5  | 75.3  | 76.2  | 1.5%  |

**Table 94. World Total Coal Flows By Importing and Exporting Countries 1,2/ (2 of 2)  
(Million Short Tons)**

|                       | 1998  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 1998-2020 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Total Coal Exports 5/ |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |
| Australia             | 183.8 | 209.0 | 217.3 | 223.4 | 229.4 | 235.8 | 242.2 | 246.3 | 250.4 | 254.4 | 260.7 | 266.9 | 267.6 | 271.7 | 274.9 | 276.9 | 278.8 | 280.7 | 282.6 | 284.2 | 286.1 | 288.5 | 2.1%      |
| United States         | 78.0  | 62.7  | 62.5  | 62.4  | 62.6  | 62.4  | 62.2  | 63.2  | 64.3  | 65.5  | 64.7  | 64.0  | 63.4  | 62.0  | 59.5  | 58.0  | 56.5  | 57.3  | 57.6  | 57.2  | 56.9  | 57.7  | -1.4%     |
| South Africa          | 73.9  | 78.8  | 80.1  | 81.4  | 82.7  | 84.0  | 85.3  | 86.3  | 87.2  | 88.2  | 89.1  | 90.1  | 91.2  | 92.3  | 93.4  | 94.5  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 1.2%      |
| Former U.S.S.R        | 16.1  | 15.5  | 15.6  | 15.7  | 15.8  | 15.9  | 16.0  | 16.1  | 16.2  | 16.4  | 16.7  | 17.0  | 17.0  | 17.4  | 17.4  | 17.4  | 17.4  | 17.6  | 17.8  | 20.1  | 20.2  | 20.3  | 1.1%      |
| Poland                | 20.4  | 18.2  | 17.5  | 16.9  | 16.3  | 15.6  | 15.0  | 14.3  | 13.7  | 13.0  | 12.3  | 11.7  | 11.4  | 11.1  | 10.8  | 10.5  | 10.3  | 10.0  | 9.7   | 9.5   | 9.2   | 8.9   | -3.7%     |
| Canada                | 37.7  | 37.0  | 35.5  | 36.1  | 36.8  | 37.4  | 38.0  | 38.6  | 39.2  | 39.6  | 40.0  | 40.4  | 40.5  | 38.4  | 38.8  | 39.2  | 39.7  | 38.3  | 37.4  | 35.6  | 36.1  | 36.7  | -0.1%     |
| China                 | 35.5  | 40.1  | 41.0  | 41.9  | 42.8  | 43.7  | 44.5  | 45.0  | 45.6  | 46.1  | 46.6  | 47.1  | 47.6  | 48.0  | 48.5  | 49.0  | 49.5  | 50.2  | 51.0  | 51.7  | 52.4  | 53.1  | 1.9%      |
| South America         | 39.7  | 45.5  | 47.7  | 49.8  | 52.0  | 54.2  | 56.3  | 57.1  | 57.9  | 58.6  | 59.4  | 60.2  | 61.1  | 62.0  | 63.0  | 63.9  | 64.8  | 66.0  | 67.2  | 68.3  | 68.9  | 67.9  | 2.5%      |
| Indonesia 4/          | 61.0  | 60.1  | 61.4  | 62.7  | 64.0  | 65.2  | 66.5  | 67.1  | 67.7  | 68.3  | 68.9  | 69.4  | 70.5  | 71.5  | 72.5  | 73.5  | 74.5  | 75.6  | 76.6  | 77.7  | 78.7  | 79.7  | 1.2%      |
| Total                 | 546.0 | 567.0 | 578.7 | 590.4 | 602.3 | 614.2 | 626.1 | 634.1 | 642.1 | 650.1 | 658.4 | 666.7 | 670.2 | 674.5 | 678.8 | 683.0 | 687.1 | 691.3 | 695.5 | 699.8 | 704.1 | 708.3 | 1.2%      |

Note: Totals may not equal sum of components due to independent rounding.

1/ Import Regions: Europe: Algeria, Austria, Belgium, Bulgaria, Croatia, Denmark, Egypt, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, Malta, Morocco, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Tunisia, Turkey, United Kingdom; Asia: Bangladesh, China, Hong Kong, India, Iran, Japan, Malaysia, North Korea, Pakistan, Philippines, South Korea, Sri Lanka, Taiwan, Thailand; America: Argentina, Brazil, Canada, Chile, Mexico, United States.

2/ Excludes non-seaborne shipments of coal to Europe and Asia.

3/ Coal exports to Europe include exports to the Middle East and Northern Africa.

4/ In 1998, exports from Indonesia include an additional 9.3 million short tons of exports from other countries not included in the forecast period.

5/ In 1998, coal exports to America includes a balancing item term used by the International Energy Agency to reconcile discrepancies between reported exports and imports. For 1998, the balancing item amounted to 26.2 million short tons.

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 data: International Energy Agency, Coal Information 1998,(Paris, France, July 1999); and Energy Information Administration, Quarterly Coal Report, October-December 1998, DOE/EIA-0121(98/4Q) (Washington, DC, July 1999). Projections: AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 95. Indicators of Macroeconomic Activity (1 of 2)**

|  | 1998   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 1998-2020 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Real Output, National(billion 1987 dollars)                      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| Total Industrial   | 4125.9 | 4244.5 | 4309.9 | 4426.0 | 4554.6 | 4659.5 | 4769.9 | 4857.3 | 4957.4 | 5050.5 | 5122.8 | 5216.4 | 5286.7 | 5379.0 | 5493.0 | 5612.8 | 5730.1 | 5798.5 | 5888.1 | 5979.7 | 6076.8 | 6170.9 | 1.8%      |
| Total Manufacturing  | 3290.8 | 3387.1 | 3445.6 | 3546.1 | 3660.2 | 3746.4 | 3837.9 | 3911.4 | 3998.7 | 4081.2 | 4146.1 | 4227.3 | 4289.8 | 4369.5 | 4467.5 | 4566.2 | 4663.1 | 4722.5 | 4801.2 | 4879.7 | 4960.5 | 5040.4 | 2.0%      |
| Coal Mining  | 30.4   | 30.6   | 31.4   | 32.0   | 32.6   | 33.2   | 33.4   | 33.6   | 33.7   | 33.9   | 33.9   | 33.9   | 34.0   | 34.0   | 34.1   | 34.3   | 34.6   | 34.7   | 35.0   | 35.1   | 35.4   | 35.6   | 0.7%      |
| Oil and Gas Extraction   | 79.3   | 78.1   | 76.2   | 75.6   | 76.0   | 76.2   | 77.3   | 78.6   | 80.1   | 81.2   | 81.9   | 83.6   | 84.7   | 85.9   | 87.2   | 88.7   | 90.4   | 91.4   | 92.4   | 93.2   | 93.8   | 94.3   | 0.8%      |
| Refining   | 140.6  | 143.5  | 144.5  | 146.8  | 147.6  | 150.1  | 152.6  | 154.6  | 157.2  | 157.9  | 158.4  | 159.0  | 158.9  | 159.4  | 159.9  | 160.4  | 161.2  | 161.4  | 162.0  | 162.4  | 163.0  | 163.6  | 0.7%      |
| Paper  | 127.6  | 132.1  | 134.5  | 136.7  | 139.1  | 141.2  | 143.4  | 145.1  | 146.6  | 148.1  | 149.3  | 150.9  | 151.8  | 153.2  | 154.8  | 156.8  | 158.8  | 160.1  | 161.3  | 162.5  | 164.0  | 165.6  | 1.2%      |
| Chemicals  | 288.3  | 295.1  | 300.6  | 306.9  | 314.9  | 320.7  | 326.5  | 331.1  | 336.6  | 341.9  | 346.9  | 352.7  | 357.2  | 363.3  | 369.9  | 376.5  | 382.4  | 387.6  | 393.6  | 399.3  | 405.7  | 412.3  | 1.6%      |
| Stone, Clay, and Glass   | 71.6   | 73.9   | 74.3   | 75.0   | 76.2   | 77.4   | 78.6   | 79.2   | 79.9   | 80.3   | 80.3   | 80.9   | 80.5   | 81.1   | 81.9   | 83.0   | 83.8   | 83.6   | 83.7   | 84.2   | 84.7   | 85.1   | 0.8%      |
| Primary Metals   | 149.7  | 149.4  | 151.8  | 153.8  | 156.9  | 159.4  | 161.5  | 161.7  | 163.1  | 164.0  | 164.0  | 165.0  | 164.7  | 166.0  | 167.2  | 168.5  | 169.2  | 169.1  | 169.4  | 169.7  | 170.5  | 171.1  | 0.6%      |
| Basic Steel  | 68.1   | 66.9   | 68.4   | 69.2   | 70.9   | 72.3   | 73.4   | 73.2   | 74.0   | 74.3   | 74.1   | 74.5   | 74.2   | 74.8   | 75.3   | 75.8   | 76.1   | 76.0   | 76.0   | 76.3   | 76.8   | 77.0   | 0.6%      |
| Primary Aluminum   | 30.1   | 30.3   | 30.4   | 30.8   | 30.9   | 31.3   | 31.5   | 31.6   | 31.7   | 31.9   | 31.9   | 32.0   | 32.1   | 32.3   | 32.5   | 32.7   | 32.8   | 33.0   | 33.0   | 33.0   | 33.1   | 33.3   | 0.5%      |
| Fabricated Metals  | 186.6  | 191.9  | 193.9  | 198.8  | 205.7  | 209.4  | 213.7  | 215.9  | 218.6  | 220.4  | 221.6  | 223.7  | 224.5  | 226.4  | 229.5  | 233.2  | 236.1  | 236.5  | 237.6  | 238.9  | 241.4  | 243.3  | 1.2%      |
| Industrial Machinery   | 333.6  | 343.0  | 357.8  | 379.1  | 395.3  | 407.4  | 421.0  | 431.4  | 443.4  | 456.1  | 464.4  | 476.0  | 483.6  | 493.0  | 508.4  | 525.3  | 544.3  | 555.3  | 567.2  | 580.9  | 596.1  | 611.2  | 2.8%      |
| Electrical Machinery   | 389.0  | 431.0  | 458.5  | 494.8  | 529.4  | 559.3  | 588.7  | 620.8  | 654.0  | 686.1  | 713.5  | 741.2  | 769.1  | 802.2  | 833.3  | 861.8  | 892.4  | 919.5  | 952.6  | 981.6  | 1005.7 | 1027.5 | 4.5%      |
| Transportation Equipment   | 425.0  | 418.2  | 413.5  | 422.3  | 443.3  | 452.7  | 465.9  | 473.3  | 486.7  | 499.5  | 509.4  | 522.6  | 531.9  | 542.6  | 559.5  | 574.9  | 588.0  | 590.6  | 599.7  | 610.3  | 623.2  | 636.6  | 1.9%      |
| Real Disposable Income by Census Division (billion 1992 dollars) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| New England  | 320    | 337    | 344    | 351    | 358    | 366    | 374    | 380    | 387    | 394    | 401    | 408    | 415    | 421    | 428    | 437    | 446    | 452    | 459    | 466    | 474    | 482    | 1.9%      |
| Middle Atlantic  | 863    | 905    | 922    | 938    | 954    | 974    | 992    | 1009   | 1025   | 1041   | 1058   | 1075   | 1089   | 1105   | 1122   | 1143   | 1163   | 1180   | 1196   | 1214   | 1233   | 1254   | 1.7%      |
| East North Central   | 874    | 915    | 932    | 950    | 968    | 990    | 1011   | 1031   | 1051   | 1070   | 1088   | 1107   | 1123   | 1140   | 1159   | 1181   | 1205   | 1223   | 1241   | 1261   | 1282   | 1304   | 1.8%      |
| West North Central   | 345    | 363    | 371    | 379    | 388    | 398    | 407    | 416    | 426    | 435    | 445    | 455    | 463    | 472    | 482    | 492    | 503    | 513    | 522    | 531    | 541    | 552    | 2.2%      |
| South Atlantic   | 937    | 1006   | 1034   | 1062   | 1092   | 1127   | 1161   | 1194   | 1228   | 1262   | 1297   | 1334   | 1368   | 1403   | 1442   | 1486   | 1531   | 1571   | 1612   | 1656   | 1702   | 1750   | 2.9%      |
| East South Central   | 269    | 284    | 291    | 298    | 304    | 312    | 320    | 327    | 334    | 342    | 349    | 357    | 364    | 371    | 379    | 388    | 398    | 406    | 415    | 424    | 434    | 444    | 2.3%      |
| West South Central   | 535    | 574    | 590    | 607    | 623    | 642    | 661    | 679    | 697    | 716    | 734    | 754    | 772    | 791    | 811    | 834    | 858    | 879    | 900    | 923    | 947    | 971    | 2.7%      |
| Mountain   | 298    | 329    | 340    | 355    | 367    | 381    | 394    | 406    | 418    | 431    | 442    | 455    | 465    | 477    | 491    | 507    | 525    | 541    | 559    | 579    | 600    | 623    | 3.4%      |
| Pacific  | 907    | 952    | 976    | 997    | 1022   | 1055   | 1087   | 1120   | 1154   | 1188   | 1223   | 1260   | 1294   | 1330   | 1370   | 1412   | 1454   | 1490   | 1524   | 1559   | 1594   | 1628   | 2.7%      |
| United States  | 5348   | 5665   | 5801   | 5936   | 6076   | 6246   | 6406   | 6562   | 6722   | 6879   | 7038   | 7204   | 7353   | 7509   | 7684   | 7881   | 8083   | 8256   | 8428   | 8613   | 8807   | 9008   | 2.4%      |
| Non-Agricultural Employment by Census Division (millions)        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |
| New England  | 6.7    | 6.8    | 6.8    | 6.9    | 6.9    | 7.0    | 7.0    | 7.1    | 7.1    | 7.1    | 7.1    | 7.1    | 7.1    | 7.1    | 7.2    | 7.2    | 7.2    | 7.2    | 7.2    | 7.2    | 7.1    | 7.1    | 0.2%      |
| Middle Atlantic  | 17.6   | 17.8   | 17.8   | 17.8   | 17.9   | 18.0   | 18.0   | 18.1   | 18.1   | 18.1   | 18.1   | 18.2   | 18.2   | 18.1   | 18.1   | 18.2   | 18.2   | 18.2   | 18.1   | 18.1   | 18.0   | 17.9   | 0.1%      |
| East North Central   | 21.6   | 21.8   | 21.8   | 21.9   | 22.1   | 22.2   | 22.3   | 22.5   | 22.5   | 22.6   | 22.7   | 22.7   | 22.7   | 22.7   | 22.8   | 22.8   | 22.9   | 22.9   | 22.9   | 22.9   | 22.8   | 22.8   | 0.2%      |
| West North Central   | 9.5    | 9.7    | 9.7    | 9.8    | 9.9    | 9.9    | 10.0   | 10.1   | 10.2   | 10.2   | 10.3   | 10.3   | 10.4   | 10.4   | 10.5   | 10.5   | 10.6   | 10.6   | 10.6   | 10.7   | 10.7   | 10.7   | 0.5%      |
| South Atlantic   | 23.4   | 24.2   | 24.3   | 24.6   | 24.9   | 25.2   | 25.6   | 25.9   | 26.2   | 26.5   | 26.8   | 27.2   | 27.4   | 27.7   | 28.0   | 28.4   | 28.8   | 29.0   | 29.3   | 29.5   | 29.7   | 30.0   | 1.1%      |
| East South Central   | 7.4    | 7.6    | 7.6    | 7.6    | 7.7    | 7.7    | 7.8    | 7.8    | 7.9    | 7.9    | 8.0    | 8.0    | 8.0    | 8.1    | 8.1    | 8.1    | 8.2    | 8.2    | 8.2    | 8.3    | 8.3    | 8.3    | 0.5%      |
| West South Central   | 13.4   | 13.9   | 14.0   | 14.2   | 14.4   | 14.6   | 14.7   | 14.9   | 15.1   | 15.2   | 15.4   | 15.5   | 15.7   | 15.8   | 15.9   | 16.1   | 16.3   | 16.4   | 16.5   | 16.6   | 16.7   | 16.8   | 1.0%      |
| Mountain   | 8.0    | 8.7    | 8.8    | 9.0    | 9.2    | 9.4    | 9.5    | 9.6    | 9.7    | 9.8    | 9.8    | 9.8    | 9.8    | 9.8    | 9.8    | 9.9    | 10.1   | 10.3   | 10.4   | 10.6   | 10.9   | 11.2   | 1.6%      |
| Pacific  | 18.6   | 19.2   | 19.3   | 19.5   | 19.7   | 20.0   | 20.2   | 20.5   | 20.7   | 20.9   | 21.1   | 21.3   | 21.5   | 21.7   | 21.8   | 22.1   | 22.3   | 22.5   | 22.6   | 22.7   | 22.9   | 23.0   | 1.0%      |
| United States  | 126.2  | 129.7  | 130.2  | 131.2  | 132.6  | 133.9  | 135.3  | 136.5  | 137.5  | 138.5  | 139.2  | 140.1  | 140.8  | 141.5  | 142.3  | 143.4  | 144.6  | 145.4  | 145.9  | 146.5  | 147.1  | 147.8  | 0.7%      |

**Table 95. Indicators of Macroeconomic Activity (2 of 2)**

Notes: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.  
Source: 1998: Standard & Poor's DRI, Simulation T250899. Projections: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 96. Imported Petroleum by Source (1 of 2)**  
**(Million Barrels Per Day)**

|                           | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020  |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Crude Oil                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Canada                    | 1.27 | 1.24 | 1.24 | 1.25 | 1.26 | 1.26 | 1.29 | 1.31 | 1.34 | 1.34 | 1.35 | 1.35 | 1.36 | 1.37 | 1.39 | 1.40 | 1.40 | 1.41 | 1.42 | 1.43 | 1.44 | 1.44 | 0.6%  |
| Mexico                    | 1.32 | 1.35 | 1.38 | 1.40 | 1.41 | 1.41 | 1.42 | 1.44 | 1.47 | 1.49 | 1.51 | 1.52 | 1.52 | 1.52 | 1.51 | 1.50 | 1.49 | 1.47 | 1.46 | 1.45 | 1.45 | 1.44 | 0.4%  |
| North Sea                 | 0.38 | 0.44 | 0.47 | 0.51 | 0.55 | 0.58 | 0.61 | 0.63 | 0.66 | 0.66 | 0.66 | 0.67 | 0.66 | 0.66 | 0.65 | 0.65 | 0.63 | 0.60 | 0.58 | 0.56 | 0.54 | 0.53 | 1.5%  |
| OPEC                      | 4.17 | 4.56 | 4.76 | 5.00 | 5.22 | 5.49 | 5.69 | 5.86 | 5.99 | 6.06 | 6.09 | 6.11 | 6.16 | 6.18 | 6.22 | 6.27 | 6.32 | 6.36 | 6.43 | 6.49 | 6.55 | 6.69 | 2.2%  |
| Latin America             | 1.38 | 1.57 | 1.61 | 1.65 | 1.67 | 1.73 | 1.79 | 1.84 | 1.89 | 1.92 | 1.94 | 1.96 | 2.01 | 2.05 | 2.09 | 2.11 | 2.13 | 2.16 | 2.19 | 2.21 | 2.24 | 2.29 | 2.3%  |
| North Africa              | 0.01 | 0.02 | 0.03 | 0.05 | 0.06 | 0.07 | 0.07 | 0.08 | 0.10 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 12.7% |
| West Africa               | 0.69 | 0.71 | 0.72 | 0.76 | 0.77 | 0.79 | 0.81 | 0.81 | 0.82 | 0.83 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 | 0.77 | 0.76 | 0.75 | 0.74 | 0.73 | 0.72 | 0.2%  |
| Indonesia                 | 0.05 | 0.09 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.08 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.8%  |
| Persian Gulf              | 2.04 | 2.17 | 2.30 | 2.43 | 2.61 | 2.79 | 2.91 | 3.03 | 3.08 | 3.10 | 3.11 | 3.11 | 3.12 | 3.12 | 3.13 | 3.18 | 3.23 | 3.24 | 3.29 | 3.34 | 3.38 | 3.48 | 2.5%  |
| Other Middle East         | 0.01 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 3.2%  |
| Other Latin America       | 0.65 | 0.59 | 0.59 | 0.62 | 0.63 | 0.65 | 0.67 | 0.68 | 0.68 | 0.67 | 0.67 | 0.67 | 0.66 | 0.65 | 0.63 | 0.62 | 0.61 | 0.60 | 0.59 | 0.58 | 0.57 | 0.56 | -0.7% |
| Other Africa              | 0.75 | 0.77 | 0.79 | 0.83 | 0.85 | 0.85 | 0.86 | 0.87 | 0.89 | 0.91 | 0.92 | 0.92 | 0.89 | 0.89 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.3%  |
| Other Asia                | 0.16 | 0.18 | 0.19 | 0.20 | 0.21 | 0.22 | 0.23 | 0.22 | 0.21 | 0.20 | 0.20 | 0.19 | 0.18 | 0.17 | 0.16 | 0.16 | 0.16 | 0.15 | 0.15 | 0.15 | 0.15 | 0.14 | -0.6% |
|                           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Light Refined Products 1/ |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |
| Canada                    | 0.25 | 0.37 | 0.40 | 0.40 | 0.41 | 0.42 | 0.43 | 0.43 | 0.41 | 0.43 | 0.39 | 0.41 | 0.40 | 0.41 | 0.42 | 0.42 | 0.42 | 0.43 | 0.44 | 0.44 | 0.45 | 0.46 | 2.8%  |
| Northern Europe           | 0.10 | 0.12 | 0.14 | 0.14 | 0.15 | 0.16 | 0.16 | 0.17 | 0.17 | 0.18 | 0.16 | 0.17 | 0.16 | 0.16 | 0.17 | 0.16 | 0.16 | 0.16 | 0.15 | 0.16 | 0.16 | 0.16 | 2.2%  |
| Southern Europe           | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.05 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.0%  |
| OPEC                      | 0.27 | 0.36 | 0.39 | 0.39 | 0.42 | 0.46 | 0.48 | 0.51 | 0.53 | 0.58 | 0.61 | 0.71 | 0.74 | 0.83 | 0.95 | 1.05 | 1.11 | 1.17 | 1.21 | 1.29 | 1.33 | 1.40 | 7.8%  |
| Latin America             | 0.19 | 0.25 | 0.26 | 0.26 | 0.27 | 0.28 | 0.29 | 0.30 | 0.31 | 0.33 | 0.34 | 0.41 | 0.43 | 0.48 | 0.55 | 0.59 | 0.64 | 0.67 | 0.70 | 0.74 | 0.76 | 0.80 | 6.8%  |
| North Africa              | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.8%  |
| West Africa               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0%  |
| Indonesia                 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0%  |
| Persian Gulf              | 0.03 | 0.06 | 0.08 | 0.08 | 0.10 | 0.12 | 0.13 | 0.15 | 0.16 | 0.18 | 0.21 | 0.24 | 0.25 | 0.28 | 0.33 | 0.39 | 0.42 | 0.44 | 0.46 | 0.49 | 0.51 | 0.54 | 14.0% |
| Caribbean Basin           | 0.27 | 0.62 | 0.64 | 0.64 | 0.65 | 0.69 | 0.70 | 0.72 | 0.74 | 0.77 | 0.83 | 0.89 | 0.98 | 1.03 | 1.11 | 1.22 | 1.32 | 1.38 | 1.44 | 1.51 | 1.58 | 1.67 | 8.6%  |
| Asian Exporters           | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 2.2%  |
| Other                     | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 2.8%  |

**Table 96. Imported Petroleum by Source (2 of 2)  
(Million Barrels Per Day)**

|                           | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|
| Heavy Refined Products 2/ |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |
| Canada                    | 0.08 | 0.06 | 0.06 | 0.12 | 0.06 | 0.08 | 0.03 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.11 | 0.12 | 0.10 | 0.07 | 0.09 | 0.11 | 0.10 | 0.04 | -3.1%     |
| Northern Europe           | 0.09 | 0.08 | 0.07 | 0.08 | 0.13 | 0.09 | 0.09 | 0.06 | 0.07 | 0.06 | 0.09 | 0.06 | 0.10 | 0.13 | 0.09 | 0.05 | 0.08 | 0.11 | 0.14 | 0.09 | 0.11 | 0.11 | 0.9%      |
| Southern Europe           | 0.03 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -1.8%     |
| OPEC                      | 0.47 | 0.32 | 0.38 | 0.35 | 0.35 | 0.35 | 0.36 | 0.38 | 0.34 | 0.41 | 0.49 | 0.48 | 0.48 | 0.50 | 0.53 | 0.58 | 0.61 | 0.63 | 0.65 | 0.69 | 0.73 | 0.78 | 2.3%      |
| Latin America             | 0.15 | 0.13 | 0.13 | 0.13 | 0.14 | 0.15 | 0.16 | 0.16 | 0.15 | 0.18 | 0.23 | 0.20 | 0.20 | 0.21 | 0.22 | 0.24 | 0.25 | 0.26 | 0.27 | 0.29 | 0.31 | 0.33 | 3.6%      |
| North Africa              | 0.23 | 0.10 | 0.11 | 0.09 | 0.08 | 0.07 | 0.05 | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -10.5%    |
| West Africa               | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.0%      |
| Indonesia                 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.0%      |
| Persian Gulf              | 0.06 | 0.06 | 0.10 | 0.10 | 0.10 | 0.10 | 0.12 | 0.15 | 0.14 | 0.18 | 0.21 | 0.23 | 0.23 | 0.24 | 0.26 | 0.29 | 0.31 | 0.32 | 0.33 | 0.35 | 0.37 | 0.40 | 9.0%      |
| Caribbean Basin           | 0.19 | 0.12 | 0.13 | 0.12 | 0.12 | 0.11 | 0.11 | 0.14 | 0.14 | 0.16 | 0.18 | 0.21 | 0.21 | 0.23 | 0.25 | 0.28 | 0.30 | 0.31 | 0.32 | 0.34 | 0.36 | 0.39 | 3.3%      |
| Asian Exporters           | 0.05 | 0.02 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -2.3%     |
| Other                     | 0.03 | 0.02 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.0%      |

1/ Includes gasoline, distillate, jet fuel, and liquified petroleum gases.

2/ Includes residual fuel oil and other refined products.

OPEC = Organization of Petroleum Exporting Countries - Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Caribbean Basin = Bahama Islands, Columbia, Ecuador, Guatemala, Jamaica, Mexico, Netherlands Antilles, Panama, Puerto Rico, Trinidad and Tobago, and the Virgin Islands.

N/A = Not applicable.

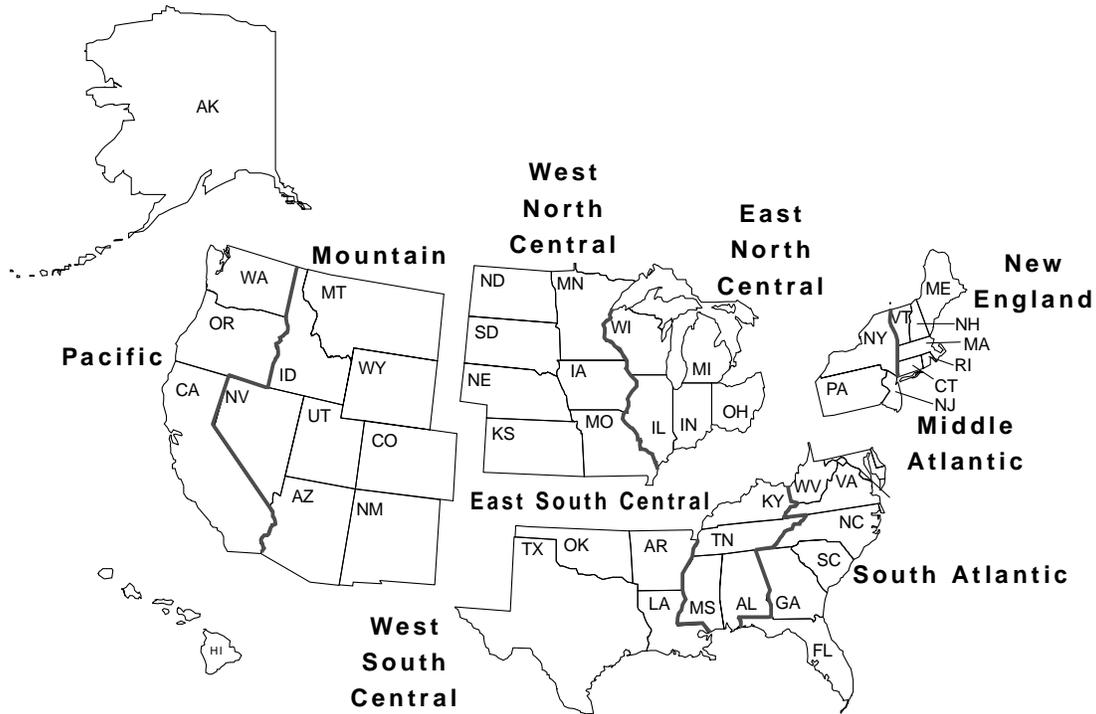
Notes: The historical data used for the projections were the most available as of July 31, 1999.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

# MAPS

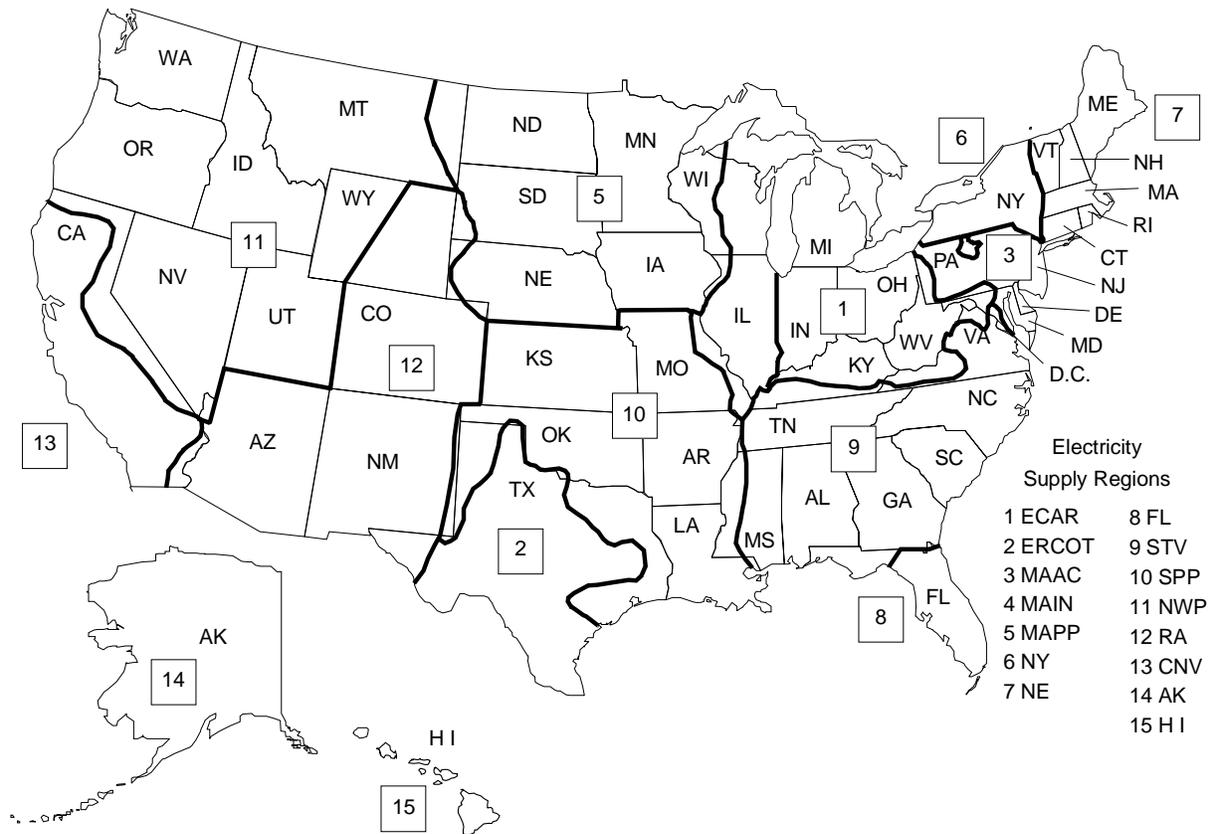
**Figure 1. United States Census Divisions**



| <u>Division 1</u>      | <u>Division 3</u>         | <u>Division 5</u>         | <u>Division 7</u>         | <u>Division 9</u> |
|------------------------|---------------------------|---------------------------|---------------------------|-------------------|
| <b>New England</b>     | <b>East North Central</b> | <b>South Atlantic</b>     | <b>West South Central</b> | <b>Pacific</b>    |
| Connecticut            | Illinois                  | Delaware                  | Arkansas                  | Alaska            |
| Maine                  | Indiana                   | District of Columbia      | Louisiana                 | California        |
| Massachusetts          | Michigan                  | Florida                   | Oklahoma                  | Hawaii            |
| New Hampshire          | Ohio                      | Georgia                   | Texas                     | Oregon            |
| Rhode Island           | Wisconsin                 | Maryland                  |                           | Washington        |
| Vermont                |                           | North Carolina            | <b>Division 8</b>         |                   |
|                        | <b>Division 4</b>         | South Carolina            | <b>Mountain</b>           |                   |
| <b>Division 2</b>      | <b>West North Central</b> | Virginia                  | Arizona                   |                   |
| <b>Middle Atlantic</b> | Iowa                      | West Virginia             | Colorado                  |                   |
| New Jersey             | Kansas                    |                           | Idaho                     |                   |
| New York               | Minnesota                 | <b>Division 6</b>         | Montana                   |                   |
| Pennsylvania           | Missouri                  | <b>East South Central</b> | Nevada                    |                   |
|                        | Nebraska                  | Alabama                   | New Mexico                |                   |
|                        | North Dakota              | Kentucky                  | Utah                      |                   |
|                        | South Dakota              | Mississippi               | Wyoming                   |                   |
|                        |                           | Tennessee                 |                           |                   |

Source: Energy Information Administration, Office of Integrated Analysis and Forecasting.

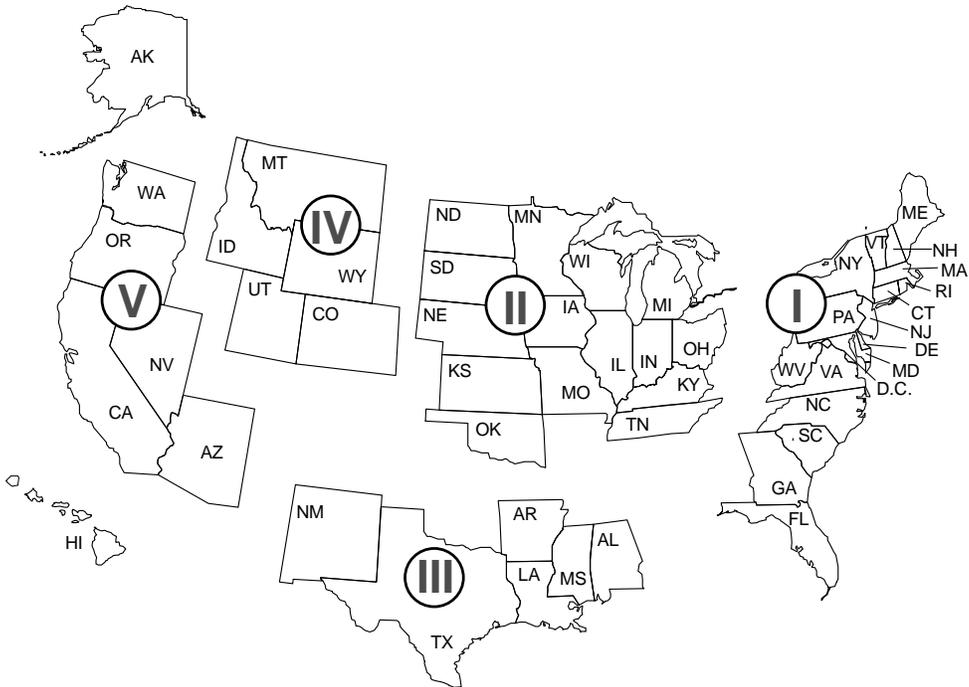
**Figure 2. Electricity Market Module (EMM) Regions**



- 1. ECAR = East Central Area Reliability Coordination Agreement
- 2. ERCOT = Electric Reliability Council of Texas
- 3. MAAC = Mid-Atlantic Area Council
- 4. MAIN = Mid-America Interconnected Network
- 5. MAPP = Mid-Continent Area Power Pool
- 6. NY = Northeast Power Coordinating Council/ New York
- 7. NE = Northeast Power Coordinating Council/ New England
- 8. FL = Southeastern Electric Reliability Council/ Florida
- 9. STV = Southeastern Electric Reliability Council /excluding Florida
- 10. SPP = Southwest Power Pool
- 11. NWP = Western Systems Coordinating Council/ Northwest Power Pool Area
- 12. RA = Western Systems Coordinating Council/ Rocky Mountain Power Area and
- 13. CNV = Western Systems Coordinating Council/ California-Southern Nevada Power
- 14. AK = Alaska
- 15. HI = Hawaii

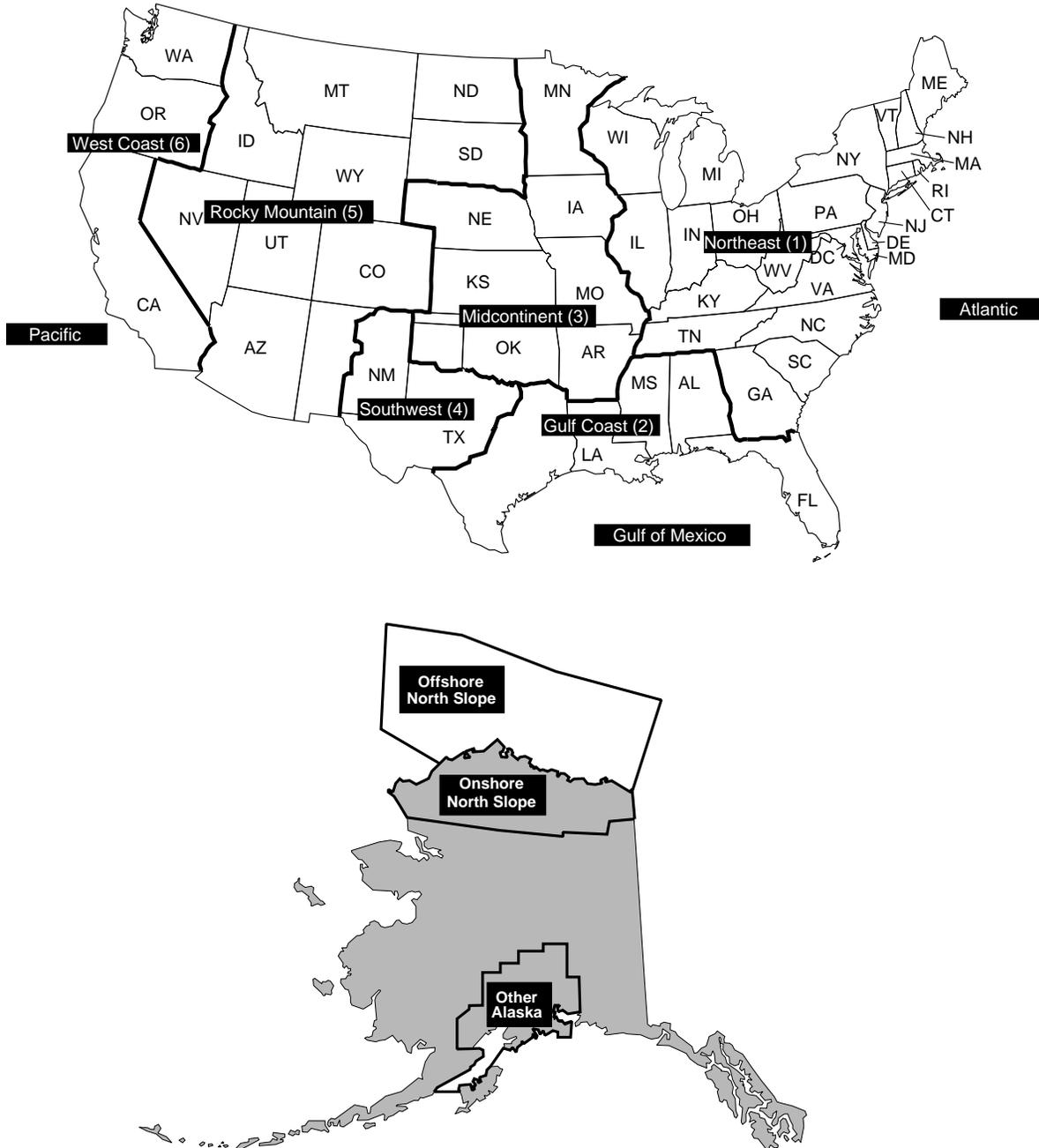
Source: Energy Information Administration, Office of Integrated Analysis and Forecasting.

Figure 3. Petroleum Administration for Defense Districts



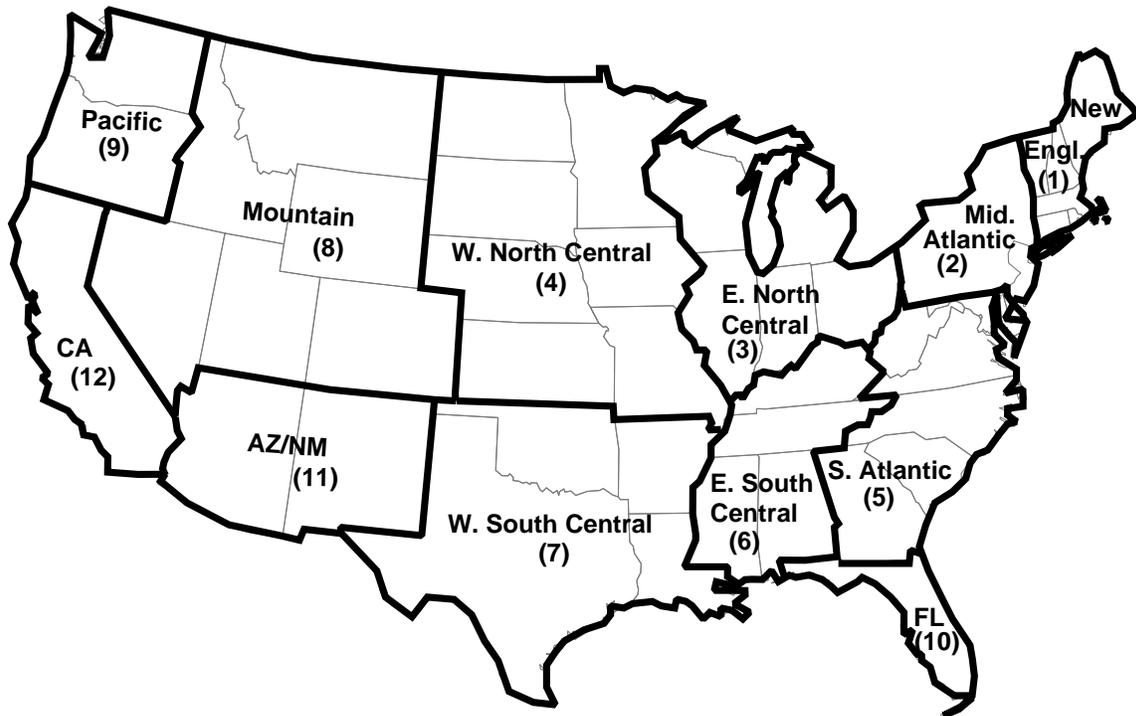
Source: Energy Information Administration, Office of Integrated Analysis and Forecasting.

**Figure 4. Oil and Gas Supply Model Regions**



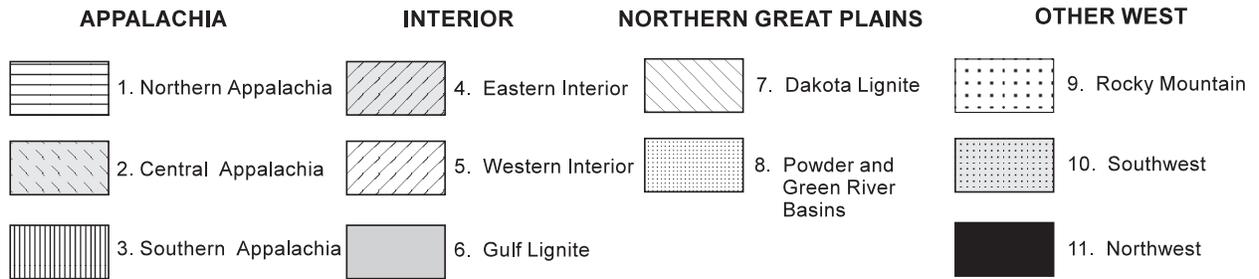
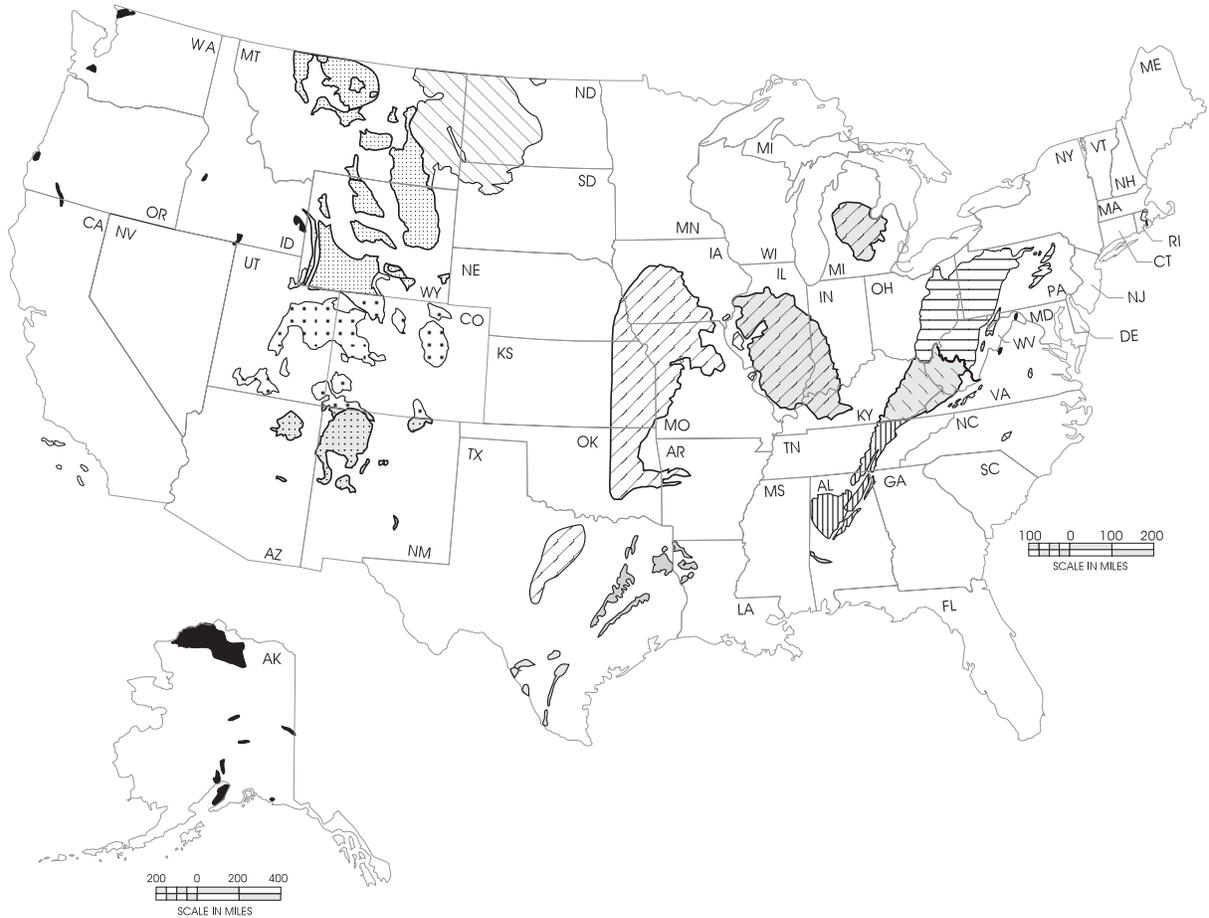
Source: Energy Information Administration, Office of Integrated Analysis and Forecasting.

Figure 5. Natural Gas Transmission and Distribution Model Regions



Source: Energy Information Administration: Office of Integrated Analysis and Forecasting.

**Figure 6. Coal Market Module (CMM) Regional Map**



Source: Office of Integrated Analysis and Forecasting.